

# JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES

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## CONTENTS FOR 6 MARCH 1937

	Page
DUNSTABLE GLIDING CLUB .. .. .	<i>Frontispiece</i>
JOURNAL .. .. .	427
BUILDING FINANCE AND ARCHITECTURE. T. P. Bennett [E.] .. .. .	429
BUILDING RESEARCH STATION EXHIBITION AT THE BUILDING CENTRE .. .. .	441
OPENING OF THE EXHIBITION OF AIRPORTS AND AIRWAYS AT THE R.I.B.A. .. .. .	444
A REVIEW OF THE EXHIBITION. Roderick Demman .. .. .	448
PLANNING REGULATIONS IN LONDON .. .. .	451
CONFERENCES AND TOURS .. .. .	453
CORRESPONDENCE :	
CORONATION PLANTING COMMITTEE. Lady Allen of Hurtwood and F. A. A. Rowse .. .. .	454
BOOK REVIEWS :	
HOUSING : A EUROPEAN SURVEY BY THE BUILDING CENTRE COMMITTEE. T. S. Barries [J.] .. .. .	455
PIONEERS OF THE MODERN MOVEMENT. Raymond McGrath [J.] .. .. .	456
CONTEMPORARY DOMESTIC ARTS .. .. .	457
CINEMAS .. .. .	457
A SWEDISH ARCHITECT. L. E. Williams [J.] .. .. .	458
PRESERVATION OF CHURCHES. W. W. Begley [L.] .. .. .	458
THE TOKYO OLYMPIC GAMES .. .. .	458
MR. KEEN'S PICTORIAL SURVEY OF OXTED AND LIMPSFIELD .. .. .	459
A NEW EDITION OF EVERSHED'S QUANTITY SURVEYING .. .. .	459
REVIEW OF PERIODICALS .. .. .	460
ACCESSIONS TO THE LIBRARY—V .. .. .	461
NOTES .. .. .	464
OBITUARIES :	
JOHN BEGG [E.]. C. G. S. .. .. .	466
ARTHUR J. PENTY. Joseph Armitage .. .. .	466
ALLIED SOCIETIES .. .. .	467
SCHOOL NOTES .. .. .	468
NOTICES .. .. .	468
COMPETITIONS .. .. .	469
MEMBERS' COLUMN .. .. .	471
MINUTES VI .. .. .	471
ARCHITECTS' AND SURVEYORS' APPROVED SOCIETY .. .. .	472
ARCHITECTS' BENEVOLENT SOCIETY .. .. .	472



Dunstable Gliding Club. From the "Airports and Airways" Exhibition

[*The Architectural Review*]

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# JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 44 3RD SERIES

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No. 9

## Journal

### SIR RAYMOND UNWIN AND THE ROYAL GOLD MEDAL

Intimation has been received from the Keeper of the Privy Purse that the King has approved the recommendation that the Royal Gold Medal should be presented this year to Sir Raymond Unwin, LL.D. [F.]. The Medal will be presented at the General Meeting on Monday, 12 April 1937, at 8.30 p.m.

### THE REGISTRATION BILL

The Registration Bill has passed its third reading in the House of Lords without amendment and without division. The next stage is in the House of Commons, where Mr. Bosson is to introduce it on the first possible occasion.

### FRANCO-BRITISH UNION OF ARCHITECTS

A note appeared in this column of the last JOURNAL announcing the 14th International Congress of Architects which is to be held in Paris this summer. This note should have been followed by another, which was crowded out, announcing the 17th Annual General Meeting of the Franco-British Union, which is also to be in Paris this year. The F.B.U.A. meeting will be held from Thursday, 15 to Sunday, 18 July, at Versailles or Fontainebleau (France), in order to permit those members who wish to attend the 14th International Congress of Architects to do so. This Congress will have its headquarters in the International Exhibition and will begin on 18 and terminate on 25 July 1937. Owing to the large number of visitors who will be in Paris for the Exhibition, especially during the summer months, the Bureau of the F.B.U.A. have decided that it would be preferable to select as headquarters a place of interest which is within easy reach of the capital. The provisional programme will include visits to old and new buildings and one or more visits to the Exhibition, where it is proposed that the annual dinner shall be held.

It is essential to the success of the meeting that those who intend to take part should inform the Hon. Secretary of the British Committee (H. Chalton Bradshaw, Esq., [F.], 6 Burlington Gardens, W.1) of their intention as soon as possible, as the details of the programme cannot be completed until this information is received. Members who desire to bring guests should give particulars when making application.

### THE SCIENCE IN BUILDING EXHIBITION

The exhibition now open at the Building Centre, arranged by the Department of Scientific and Industrial Research, is one that architects ought to make a special point of seeing. For the first time the work of all the organisations contributing research knowledge to the building industry is shown under one roof, and it is an opportunity that may not occur again. The President of the R.I.B.A., in opening the exhibition, said that the building industry as a whole did not realise the amount of information that was at their disposal for a mere asking for it. He specially commended the exhibition catalogue or brochure, which, he said, should be found on the reference bookshelf of every architect's office. The exhibition is fully described elsewhere in this number of the JOURNAL.

### THE AIRPORTS AND AIRWAYS EXHIBITION

The opening of the Airports Exhibition by the Secretary of State for Air is reported on a later page, where also will be found photographs of sample exhibits. No reproductions can give a proper idea either of the quality or the scope of the exhibition as a whole. That can be realised only by paying the exhibition a visit, and we hope that before it closes on 24 March every member in or near London will have been to see it. As we have frequently said before in these columns, the success of the R.I.B.A. exhibitions depends primarily on the amount of support that they receive from the profession. So far, the support has been excellent, and the attention paid to the exhibition in the lay Press has proved emphatically that in choosing airports for their 1937 exhibition the Committee made a wise decision in responding to a demand from public and experts alike for information on one of the most urgent contemporary problems. What may not be realised fully is that in every way airport and airways design is an architectural problem. In certain respects, in the design of buildings, it is directly an architectural matter, but the location of airports and airway routes, the design of equipment and the design of aeroplanes all introduce architectural and planning problems so that no section of the profession can fail to find points of interest and of urgent personal concern in such a show

as this, which covers the whole field in a suggestive and constructive manner.

The opening was a crowded, distinguished affair, attended by almost every air expert in the country and many notable visitors from abroad, among whom were the Oberbürgermeister of Cologne and Dr. Krach, the representative of the Cologne Chamber of Commerce, who flew to London and back that day. The Cologne Airport, which is shown in photographs on page 446, is one of the finest modern airports in Europe. Among the German visitors was also Herr Ernst Sagebiel, architect of the new Templehof Airport, Berlin. An exhibition that demands such attention from foreign experts cannot fail to have much to teach us in Britain. The catalogue, following the model of the previous exhibition catalogues, is a complete handbook to the show, fully illustrated, and with general articles on the various sections. It can be bought by those who cannot come to the exhibition, price one shilling, plus sixpence postage.

#### THE GARDEN CITIES AND TOWN PLANNING ASSOCIATION

Sir Raymond Unwin, just returned from his visit to America, presided at a dinner of the Association that was given on 26 February in honour of Alderman A. T. Pike, O.B.E. Alderman Pike, who has served the Association for seventeen years, has just relinquished the post of secretary. The dinner was well attended by persons prominent in the town-planning world, who heartily applauded Mr. Cecil Harmsworth's praise of the guest of honour. In reply, Alderman Pike referred to the great change that had taken place during recent years in the public's outlook on housing. In the early days of the Association it had been extremely difficult to arouse any public interest at all in it, and now the only subject, he suggested, on which Europe seemed to be agreed was the value of garden cities. On the burning question of countryside amenities he felt sure that the only sure way of preserving was by properly planned development.

#### THE S.P.A.B.

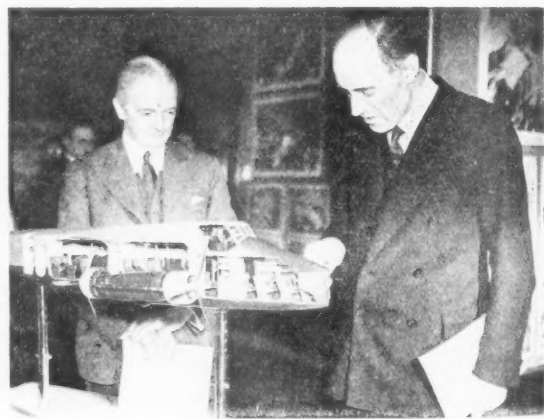
The Society for the Protection of Ancient Buildings has just published the first of a new series of Quarterly Reports. This is an admirable move which will commend itself to all those who like to be able to follow the Society's activities. Hitherto, except for Mr. Powys' vigorous (and frequent) excursions in the columns of *The Times*, and for the Society's admirable Annual Reports, it has had no direct and regular means of communicating with all its members and the public. 22 March is the sixtieth jubilee of the Society's foundation (which it is celebrating by a dinner at Claridge's), but the need for its continued existence has never been more evident than it is to-day. The Quarterly Report is sent free to members, and can be bought by non-members for 6d.

#### THE A.A.S.T.A.

The February number of *The Keystone*, the bi-monthly journal of the Association of Architects, Surveyors and Technical Assistants, has appeared in a new cover and with a new format. The changes are not demonstrative but are all good. The leading article on the A.A.S.T.A. policy and aims for 1937 deals chiefly with the Association's decision to appoint a representative to the R.I.B.A. Council, a decision which is a sign of the healing of some old sores and one which we hope will be as genuinely welcomed by A.A.S.T.A. members as it is by the R.I.B.A. The leading article also deals clearly and fairly with the Association's policy with reference to salary scales. It is also interesting to note that *The Keystone* contains a special "stop press" leaflet stating that the Association is supporting the Registration Bill "because they feel that without doubt it will be in the best interests of the profession, of both salaried men and private practising architects, that the use of the word 'architect' should be thus safeguarded. It can only raise the status of architects, and, as far as the salaried section is concerned, this is certainly needed."

#### MR. W. T. PLUME RETIRES

After more than fifty-one years' service as Editor Mr. W. T. Plume retired last week from *The Builder*. In 1935 we could congratulate him on his fiftieth jubilee with the hope that *The Builder* would enter its second century in 1942 with Mr. Plume still in the chair. That hope is not to be fulfilled, but we can now wish him many years healthy, happy retirement as Editor Emeritus. When the centenary does come it will be Mr. Plume's pride that he conducted the paper for more than half its hundred years and still had time to spare at the latter end to enjoy his well-earned leisure.



*The President with Lord Swinton at the opening of the Airports Exhibition*





*Dorset House, Marylebone Road, by T. P. Bennett & Son, under construction*

## BUILDING FINANCE AND ARCHITECTURE

BY T. P. BENNETT, F.R.I.B.A.

READ BEFORE THE ROYAL INSTITUTE OF BRITISH ARCHITECTS ON MONDAY, 22 FEBRUARY 1937  
THE PRESIDENT (MR. PERCY E. THOMAS) IN THE CHAIR

### PREAMBLE

Serious consideration of the part played by the architect in controlling expenditure immediately discloses the fact that his responsibilities are extensive and far-reaching.

They cover a wide range of aspects of building and affect the execution of large buildings in a great number of different ways.

Strictly within the scope of the work of the architect lies skilful planning from the economic standpoint, clever and economical design, skilful direction of the equipment of buildings and adequate foresight and vision.

There is also appreciation of social changes and scientific development, and added to these factors the efficient control of cost.

Outside these more intimate services and this field of professional knowledge, there must, in many cases, be an accurate appreciation of the means by which money is raised to meet the cost of building operations, because to a large extent guidance in respect of the details of the contract must be influenced by the method of finance.

These are some of the aspects of architecture and finance with which I hope to deal to-night.

### PART I—SPENDING THE NATION'S MONEY

Capital is being constantly invested in rebuilding homes, places of amusement and of utility, and the aggregate cost of buildings represents, therefore, a very large part of the savings of the community.

These vast investments are subject to wear and

tear, and to depreciation which is the result of progress of sociology and science.

The actual amount of money invested in building according to Board of Trade Statistics was as follows :—

	1934.	1935.	1936. Jan. to Oct.
1. Dwelling houses ..	69,586,200	78,429,100	63,255,400
2. Factories and workshops ..	6,072,300	7,669,500	8,627,300
3. Shops, offices, warehouses and other business premises	5,021,200	7,911,200	7,282,100
4. Churches, schools and other public buildings ..	5,872,100	9,028,000	8,661,300
5. Other buildings and additions and alterations to existing buildings ..	9,011,200	11,270,000	10,502,900
Excluding London	£95,563,000	£114,307,800	£98,329,000

A very large part of this expenditure was controlled by architects, and this control has to be exercised with keen appreciation of the meaning, method of procuring and the difficulties and limitations involved by "Finance."

Artistically, the architect is vitally concerned in finance because, just as the best piece of pottery, the best piece of furniture, the best machine is primarily a thing of utility, so a building which is properly adjusted to its use is the best both artistically and financially.

Arising out of the conception of architecture on these lines, the designer is faced financially with two types of problem. In one he designs a building of which the financial success is difficult to determine, for example, the church, the headquarters of a bank, a railway station, a private house.

In these cases there is no means of knowing whether the architect has built at the lowest commensurate cost or at a high cost.

There are other types of building in which the building has to be let or sold to members of the public, and inasmuch as it is subject to competition with other buildings put up by other owners its financial success or failure must be disclosed.

Finance in this circumstance achieves a vitally important place because it is easily discovered and success or failure obvious.

There is a wonderful pleasure in spending money on fine materials, and this pleasure is as universal as the pleasure derived by the majority of women in buying fine clothes; just as the housewife devises a clever means of dressing on a £2,000 a year standard with a £1,000 a year income, so in most cases must the architect try to produce a building conceived by a £200,000 mind for £100,000.

It is useless, however, to consider that the results in either case are precisely the same, although the difference may be visible only to the discerning few.

## PLANNING FOR COST

The grasp of the problem of finance centres first around planning. A real grasp of building will dictate the shape of the plan, economy of approaches, a clear grasp of essential services, a knowledge of the precise purpose of the building and familiarity with the exact dimensions of units and their inter-relation.

The planning of the hospital ward is extravagant if the gangways are unnecessarily large and unworkable if they are inadequate.

The theatre is useless if the sizes of seats and gangways are not properly proportioned to the use of patrons.

The planning of the flat is bad if the space available is not exactly apportioned between the living accommodation, bedrooms and subsidiary services. This involves a clear visualisation of the standard of building required governed by tradition, by travel, by science, social standing, comfort, convenience and relative wealth.

An excellent example of the effect of planning on financial return is provided by the arrangement of the entrances to blocks of flats. Bearing in mind that the tenant of an expensive flat dislikes an entrance or approach which has the appearance of a hotel.

Amongst the flats for which I have been responsible the wide divergences between the number of flats to each entrance are given in the following list:—

	Flats per entrance Entrances. (approx.)	
Eyre Court, Finchley Road ..	7	17
Eresby House, Rutland Gate ..	3	19
Rossmore Court, Park Road ..	1	132
Dorset House, Marylebone Road ..	1	187
Westminster Gardens, S.W.1 ..	2	30
Marshall Court, S.W.1 ..	2	75
St. John's Court, Finchley Road ..	2	44

In an expensive block the cost of portering and maintaining an entrance is £300-£400 per annum, and the financial reaction can, therefore, be readily appreciated.

## PLANNING FOR CONSTRUCTION

Besides planning for economic usage, the architect must plan for economic construction.

To deal adequately with the money at his disposal he must have a clear knowledge of the requirements of brick construction and weight-carrying capacity, the advantages of steel framing and reinforced concrete, the spacing of units and the use of economic spans.

This knowledge must be so thoroughly absorbed that it does not affect the play of the architect's imagination in arranging the shapes and sizes of the building.

A complete architectural mind will similarly know the cost, the effect, the advantage of each grade of construction and type of material so that he can reduce, extend or eliminate with complete appreciation of the loss of solidity or loss of humanity which each expenditure or economy involves.

### ELEVATION, DECORATION AND COST

The power to design must embrace an ability to use only costly forms or massing where the conditions of the problem justify disregard for cost.

Wasteful thickness of materials is a constant source of expenditure. In design involving mechanical support like steel and reinforced concrete changes of plane involve constant expenditure.

To-day hand-made work is a luxury, yet it still has an atmosphere and appeal which is absent in the product of the machine. In some cases skill and not money may be paramount.

### COST AND MATERIALS

The materials of the elevation both internally and externally must be clearly valued in the mind. The true architect will know almost the precise variation in general cost which will be involved by a conception in stone, brick, iron, lead, bronze or glass.

### PREPARATION OF ESTIMATES

An accurate estimate of cost is of paramount importance to the financial mind. In very many cases it represents the difference between comfort or bankruptcy for a number of individuals.

Financially, accurate estimates produce confidence in building. In many cases it may be desirable to give alternative estimates for different materials of construction, different methods of finish, various types of equipment.

(1) Some estimators are tempted to bring the figures out to the sum of money mentioned casually by the building owner. Many of these sums are deliberately false.

(2) Insufficient allowance is made for the movement of the market.

(3) Insufficiently prepared detail of the building or its equipment and consequent confusion as to the amount of work included in the original estimate.

(4) Honest difference of opinion in the minds of the technical man and the lay man as to what constitutes a complete building.

It is important in approximate estimates clearly to define the work included in the estimate and to furnish the owner with a list of the work excluded from the estimate.

(5) In the case of speculative buildings it is often almost impossible to foresee the use to which each portion of the building will be put, or adequately to provide for such unknown use by economically installing adequate heating,

hot water, steam cooking, artificial ventilation, electric supply and decoration, and if these portions of buildings are subsequently let to tenants requiring this expensive equipment.

(6) In equipping other types of buildings change of policy often includes substantial additions to cost which have not been provided for in the original estimate, and unless these extra works are covered by subsidiary estimates they ultimately cause dissatisfaction.

This leads to the final point:—

All the changes of policy and alteration of design which affect the contract after its commencement should be immediately recorded by the issue of approximate estimates which are clearly shown to be additional to the original cost of the building.

### ACCURATE COST

The architectural profession as a whole is accused of being financially immoral, since its estimate of the cost of the buildings is constantly wrong and in certain cases is flagrantly wrong.

It is argued by the financial mind that either the architect knows his job and fails to give an accurate idea of the expenditure he is certain to incur or he is incompetent and does not know the cost of the works he controls or professes to control. In either case there is a serious loss to the prestige of the profession unless some machinery is employed which shows accurately the cause of the expenditure.

### ALTERNATIVES AND COST

It is well known to all of us that increased cost of building arises from unknown quantities such as foundation difficulties, demands of the vast army of authorities who have control of portions of the building, the disclosure of requirements of clients at much too late a date, or constant alterations during progress of construction. What is a luxury to-day is often a necessity to-morrow, and as a building cannot afford to be out of date many large schemes must of necessity be adjusted during progress. Foresight by the architect cannot always avoid this contingency.

On all works there should be machinery to acquaint the owner with the expenditure which he is daily incurring.

In the early stages of the scheme estimates must, of necessity, be based upon somewhat vague and uncertain foundations. Rough and ready methods like cubing are almost the only means of arriving at a figure. Cubes are affected by size and shape, by the number of storeys in the building, by foundations, methods of construction, standard of finish, type of equipment, or speed of erection, and none of these items affect the bulk which is the basis of the cube.

The estimate, once prepared, is subject to many

vicissitudes, not the least of which is the length of time taken in extensive building operations.

Large building schemes taking a year or more to design, one, three, five or more years to build, necessarily involve a period during which the prices of materials and rates of labour change.

These estimates for large buildings also need to take account of incidental financial loss, such as loss of interest, change of bank rate, loss during period of building, waste on personnel, fuel, light and other essentials before the building is fully occupied.

The estimate should also differentiate between expenditure which is deliberately incurred to decrease maintenance or produce "usability" without necessarily increasing the yield per cent. on the money invested or alternatively involves the loss of interest.

#### HONESTY OR COURAGE OF PROMOTERS

Many building owners are loathe to admit to themselves the cost of contemplated works and, when presented with true estimates, frequently endeavour arbitrarily to reduce these figures, although there may ultimately be no hope of actually achieving the reduction. The honest architect has lost jobs through this honesty, but rarely more than once.

#### DIFFERENCES BETWEEN BUILDINGS : (a) TO SELL. (b) TO KEEP

The commercial mind necessarily views differently the importance of capital expenditure and revenue expenditure. If the building is designed to sell it may be that the builder-owner or speculator will not listen to cost which is incurred with a view to reducing upkeep. Similarly, big property-owning companies, banks, local authorities and Governments tend to exaggerate the capital cost on buildings incurred for the purpose of reducing maintenance since they live in surroundings which are subject to the constant irritations of replacements and repair.

In building booms, many buildings are built only to sell; in building slumps, many buildings built to sell must necessarily be kept and in the case of the larger types of building development extended experience shows that it is impossible to judge except within rather wide limits whether the building will ultimately be sold or kept. In consequence, considerable responsibility rests with the architect in deciding upon the right standard of building without knowing the eventual destination of the structure.

It is possible to have too high a standard of finish and too good a building.

Buildings tend to have ever shorter and shorter lives as construction changes, surrounding developments alter, variations of social outlook revolutionise the whole form and shape of construction. Even the most wealthy owner must decide whether he can afford the highest standard of work.

The element of judgment on cost, as well as on artistic fitness, is never absent.

Judgment business has become ever more important. Almost as soon as any type of building is conceived and developed the social outlook changes, or experts produce other and different systems of construction and it is out of date.

Children must be assembled in the central halls of schools, then they must not be assembled in central halls. Classrooms should have one-sided ventilation and then they should have two-sided ventilation. Then, school buildings should be one storey. Children, as in Oliver Hill's new schools, should be allowed to practise a mild form of nudism, and this constantly changing basis of design carries with it constantly changing estimates of cost and in many cases the desire to get on with the building precludes the preparation of proper estimates of cost upon the views of proper experts, based upon the advice of proper sociologists, who in turn balm the architect for exceeding his expenditure.

#### WORKING WITHIN THE ESTIMATE

Production of the accurate estimate is only the beginning of the financial success of a building. All the developments of sketch plans and working drawings, placing of contracts and sub-contracts, the fresh ideas of tenants, directors and building owners vary the cost of buildings, and in almost every case cause an increase.

Having passed the stage of the original estimate the accuracy and completeness of the working drawings go far towards stabilising the cost at the level of the builder's tender. Drawings must be respected. Construction must be accurately plotted on the plans, beams and stanchions accurately married up to the site dimensions and the plans plotted accurately to the survey.

The standing of the individual architect and, indeed, of the whole profession, is governed to a very large extent by the sound workmanship which goes into these working drawings.

#### ACCURATE QUANTITIES

Similarly, the architectural profession's co-partner, the quantity surveyor, must produce accurate and extensive quantities. The desire for speed from quantity surveyors sometimes produces a long list of lump sums and provisional amounts to cover services which ought to be measured. These lump



sums are a cause of worry and anxiety, because such items must be re-measured and re-priced before the actual cost is known.

### PROPER COMPETITION FOR SUB-CONTRACTS

Competition amongst contractors in respect of sub-contracts has to-day become a very large part of the responsibility of the architect.

These same sub-contractors, in order to secure the contract for themselves, tend more and more to establish drawing offices for the production of drawings which, strictly speaking, are the province of the architect. This is a kind of saving of cost on the part of the architect which must be strenuously opposed, and we must extend still further our knowledge of ventilation, electricity, type of fuel used or of the practical application of colour and internal decoration.

### CONTROL OF OTHER PEOPLE'S EXPENDITURE

It is certain that the firms who spend their money producing these drawings must charge the building owner for their work, but the practice tends to eliminate real competition and prices are then charged which are far in excess of the real value of the work put into the building. It is often amazingly difficult to stop owners from spending money, and some type of periodical return of cost should be essential on every type of building.

### CHECK ON VARIATIONS

Every variation should be covered by a variation order. Every contractor should every few weeks report extras which he considers he has incurred or which have been the effect of indirect instructions from the client or architect. Failure to disclose these costs often leads the building owner to indulge in luxuries which he would otherwise avoid, and so the final cost of the building is far greater than the conditions of the problem merit or justify.

Probably the most difficult part of the control of cost is that involved in the control of variations. Variations arise from such a vast variety of sources. The client may think of something else he may like to do. Our client's wife might even change her mind and decide to have the dining-room where the living-room existed before, notwithstanding that the kitchen is built and must be put in the spot previously allotted to the cloak room, which, in turn, means that the main drive takes the place of the tradesmen's entrance. But in a large number of buildings these revisions are much more difficult to handle because the expenditure involved is great. And so the amenity is added and necessarily adds to the cost.

The architect is not immune from this process of reasoning, and he sees many adjustments which are a definite asset but for which no allowance was made in the original cost.

If the building is built to let, the incoming tenant has a series of requirements, and wants these requirements incorporated in the building. The cost of these items is also added to the total.

Foundations, although they have been carefully checked by trial holes, sometimes prove to be different from the anticipated shape and depth and involve additional cost, and to these contingencies are added the unknown demands of the public authorities, rising costs, difficulties in obtaining delivery of materials. It is easy to realise that the check on variations and specific report of all their costs are things which are extremely difficult to handle, and in dealing with any type of work on a large scale an accurate and efficient system requires unremitting attention if it is to be faultlessly carried out.

### THE FINANCIAL ASPECT OF THE TYPE OF DEVELOPMENT

The architect whose work lies principally in the field of building development, whether it is in connection with the building of houses, offices, shops, theatres, cinemas or similar buildings, eventually must acquire a knowledge of the demands of the type of building with which he is interested. Often this knowledge greatly exceeds that of his clients.

He must become familiar with the earning capacity of various localities, type of development and suitability of buildings for the particular neighbourhood under review.

This knowledge is, indeed, often only possible to the person having the sensitiveness of an artistic brain. It necessitates clear visualisation of the social conditions surrounding different classes of the population. It involves foresight which can accurately see the trend of social conditions. It requires an imagination which can select from the experiments of a particular period those which will pass into the general use of the community and those which will ultimately fail.

Side by side with this power to visualise and to plan for suitable development must come the power to relate the building to the site, not only practically but from the point of view of earning capacity, and it is not a very far journey from this point to a knowledge of land values and a knowledge of rack rents which is sufficient to indicate the relationship between cost of development and the cost of land.

The study of development from the social point of view has some marvellously interesting aspects. We are all familiar with Hogarth's period, during which, according to Hogarth, women dressed surrounded by their men visitors.



There are such things as :—

- (a) The increase in luxury in the cinema to cater for the luxurious taste of the man of small means.
- (b) The increase in flat building due to the desire of women to work instead of keeping house.
- (c) The real economy which results in the surrender of the town house with nine or ten servants and taking a flat with an adequate staff of three or four.

Finally, the financial mind was obviously successful which foresaw the economy, thrift and independence which led to the development of millions of houses in England paid for through the millions produced from building societies upon the finest and most extensive financial system evolved in any country.

### THE CREATION OF LAND VALUES

Strictly speaking, land is worth what it can ultimately earn. In large cities much of the land acquires a fictitious value which sooner or later will be discovered and will cause devaluation.

If a sound scheme is to be secured, the land value or ground rent must be covered by the earning capacity of the building a certain number of times. The number of times varies with the position of the land, but a fair average would be  $3\frac{1}{2}$  times.

The more times the land value is covered the greater the value of the leasehold and the greater the value of the freehold.

This is not, as would seem, a paradoxical statement, since income related to the number of years' purchase constitutes the value of the building.

### THE PROPER APPORTIONMENT OF THE VALUE OF "AMENITIES"

Outside this arithmetical calculation, however, is another value which requires extensive judgment and knowledge, and that is the value of "amenities."

Amenities are things which can only be properly valued by the imaginative judgment. Overcrowding of the land will reduce amenities, bad types of day lighting, introduction of buildings which are too high, bad planning for aspect, bad planning for prospect, bad approaches.

These items, which are fundamentally unalterable when the buildings are complete, lower the value of both land and buildings, but do not show on the financial statement.

The relationship between site development, site cost and development cost is the creation of permanent value.

In many schemes the architect is the only person concerned with the scheme who has a complete and comprehensive grasp of all these factors in their correct perspective.

The permanent financial value of amenities on a big scale in London is to be found in the Bloomsbury squares.

We have become so familiar with the aesthetic value of these squares that we are apt to overlook the equally great financial advantage which they secure.

### AMENITIES CONSTANTLY CHANGE

It is easy to see that the factors to which these words have been attached are constantly changing. Views of human beings upon the ways in which they want to live and work, the way in which other human beings wish to live and work are never stable. There are periods in which the lower classes of the community have to accept menial conditions of existence. There are stages in which the mass members of the community are treated in mass and kept quiet by State entertainment.

There are socialistic periods in which there is a tendency to give all the members of the community equal enjoyment largely irrespective of the individual possession of wealth.

The introduction of new materials, of mechanical equipment, development of such things as heating, lighting, ventilation, silent floors, open spaces all react upon the permanent value of the development and at each stage someone must decide upon the relative importance of these factors. Someone must also decide upon the extent to which these amenities can be allotted to a particular development and a very small amount of individual acquaintance with buildings of this type shows that these factors have different grades of importance with different buildings in different localities.

Items which are essential to flats in Knightsbridge may be only "desirable" in St. John's Wood and definitely detrimental in Poplar.

The standard of decoration which will attract patrons to a cinema in Mile End would repel the patron in Curzon Street.

Placing decoration upon a low financial level, there is a measure of artistic skill far from unimportant in producing an exterior or interior which appeals to the user of the building, when this "user" has to be found as a tenant the decoration acquires a financial value.

### FINANCIAL IMPORTANCE OF ACCURATE PRACTICAL DECISIONS

Financially, this decision is one of the principal factors which dictate the success or failure of a particular investment. The person who must make a decision or, at any rate, offer advice the basis for a decision in almost every case is the architect, and he must indicate or adopt :—

- (a) Correct standard of construction.
- (b) Grade of amenities suitable for the pre-determined rent.

- (c) Hold an accurate balance between the cost of building and the cost of upkeep.
- (d) Determine the extent to which his clients are justified in artificially enriching the land adjacent to the building.

All these decisions involve :—

1. An accurate knowledge of land cost.
2. An accurate knowledge of building cost.
3. The rents obtainable.
4. Accommodation required to command these rents.
5. Standard of building required to demand these rents.
6. Cost of upkeep compared with cost of construction.
7. Reasonable rate of interest on the capital involved.

### ALL BUILDINGS ARE SUBJECT TO FINANCIAL CONTROL

Whilst these factors have been enumerated primarily in respect of buildings for development, in the large field of national economy precisely the same conditions apply to buildings where the financial return is not obvious, and an equal measure of responsibility devolves upon the architect who designs a town hall or a hospital.

### PART II

#### 1. FINDING MONEY

It is easy to pay for a building by taking from a bank a suitable amount of currency and paying this sum of money to a builder, and thus completing a financial transaction.

This is the simplest of all methods of financing buildings. The only cost which is incurred on account of finance is loss of interest. This loss of interest may—

- (a) Be written off as interest which the owner never expected to receive.
- (b) It may involve loss of bank deposit interest, to-day at  $\frac{1}{2}$  per cent.
- (c) It may involve the loss of interest due to the sale of securities earning from 3 per cent. to 6 per cent.

The sums of money involved in this method of financing buildings are usually small.

In the case of Corporations with large amounts of idle money, they may, however, be large, but these transactions, whether large or small, whether due to the erection of private houses or the headquarters of big companies, are financially simple transactions.

#### 2. LOSS OF INTEREST

(a) The loss of interest may never be taken into account in the case of the family budget.

(b) The cost may be put into the accounts of the company in the form of an annual charge calculated as interest but actually taking the place of yearly rent, and the money sunk in the building may remain a permanent liability of the company.

(c) The cost of the building may be written off by yearly depreciation in the accounts of the company.

(d) The company may, as soon as the building is complete, discount the cost and rate of interest and regard themselves as housed without charge.

#### 3. PARTIAL CAPITAL

In a great number of projects finance on these simple lines is not possible because the full value of the building project is not available, and some other method of finance is, therefore, necessary.

The next method divides the transaction into two distinct portions: the first involves the provision of cash which represents the first risk on the property—the first loss in case of failure. This money represents the amount of safeguard to any other money which may be put into a venture, since when it is discounted the building may be so far above the value of surrounding and competing buildings that it is therefore certain of a profitable market.

When cash to this extent has been invested in a building, it is possible to obtain the balance of the money required in the form of a mortgage.

#### 4. FIRST MORTGAGE

On first mortgage a conservative advance is limited to a loan of approximately two-thirds of the total cost of the building, thus providing a probable safe margin.

The American boom in the post-war period undermined its whole financial security by allowing these mortgages, first or otherwise, to rise to the level of 70 per cent., 80 per cent., 90 per cent., 95 per cent. or even 100 per cent. of the total cost. Eventually the result was disastrous and the loss almost irretrievable.

In connection with this question of the increasing of mortgages to an unsound level, my notes on discussions with Americans who were involved in both the boom and the slump are both interesting and illuminating to the conservative English mind.

It is interesting at this stage to give a copy of a brief report written on my return from America in 1934.

*Notes made after visit to America in 1934.*

#### APARTMENT HOUSE FINANCE

There have been in the past years three methods of financing buildings including apartment houses.

The finance is obtained before the building project is commenced, and as numerous references were made to re-financing after buildings were rented it appears that mortgages obtained are used for building finances and continue as permanent mortgages without a break.

1. The first method is finance by way of first mortgage obtained from (A) an insurance company, (B) savings banks. This is governed by a valuation obtained by the insurance company or bank, valued on a conservative basis, advances being made up to a maximum of about 65 per cent. of the valuation. These valuations were regarded as reliable, and as made by responsible men who put as fair a value on the property as possible. The rate of interest charged was usually  $5\frac{1}{2}$  per cent., and the mortgagee therefore had the usual full security for his mortgage.

(ii) The mortgages were obtained from bond companies. There were a considerable number of these companies, operating on similar lines. Most of them commenced operations in areas outside New York, where finance was extremely difficult to obtain, and where, consequently, they were able to secure relatively high rates of interest.

They established a system of bonds paying an average of about  $6\frac{1}{4}$  per cent. In the case of the best corporations the bonds were guaranteed, and in spite of the failure of certain buildings the company paid its bondholders in full, and each year advertised "Forty-five/forty-six years, etc., without a loss."

As the amount of money available for lending increased the bond companies came to New York to operate in the city, and there found that money from the insurance companies was plentiful. There was, in fact, substantial competition for lending on the conservative basis described above.

On this basis the bond companies could not compete and still continue to pay their overheads and give their bondholders  $6\frac{1}{4}$  per cent. They therefore commenced to offer an ever-increasing proportion of the total cost, steadily rising from the conservative 60-65 per cent. to 80-85-90-95 per cent. and even 100 per cent. The bondholding company considered that they had safeguarded the interest of their shareholders by insisting upon a very short period of amortisation, in some cases being as short as five years and apparently never being more than ten years.

For these services the bond company charged a very substantial and even exorbitant fee. The rate of interest was still such that it nominally competed with the insurance company's, namely,  $5\frac{1}{2}$  per cent.

The result of this procedure was to bring into real estate development a large number of operators of a highly speculative order, who possessed little or no real financial backing.

(iii) The third source of finance was through title guaranty companies, who lent money on mortgage on somewhat similar terms to those of the insurance companies and savings banks, and who occupied an intermediate situation between these institutions and the bond-issuing houses.

2. As building increased the cost rose, and rents rose in proportion. The amount of money available in the United States led to the introduction of a system of co-operative building, where tenants of apartment houses, and presumably offices, purchased their section of the building, and as the increase in rents did not appear to be keeping pace with the

increase in cost of building speculators were induced by the necessity of securing money to work on an ever-narrowing margin.

3. The rating authorities of New York City failed to enforce the payment of rates, and holding companies were allowed to let their rates fall in arrear one, two, three, four and even five years, paying for this privilege 7 per cent. on the unpaid rates (now increased to 10 per cent.), and being permitted to add the interest to the unpaid rates if they so desired. In a number of cases the bond-issuing houses, and particularly the title guaranty companies, paid interest on their bonds without disclosing the fact that they had not paid the rates.

It will thus be seen that at the height of the boom a financial structure was created of the most dangerous order, ready at any moment to crumble at the first suggestion of unfavourable conditions.

The slump first caused the co-operative system of purchase to cease, next to reduce rents substantially, and, finally, to wipe out successively the equity holders, third mortgage, second, and, finally, first mortgage holders; and conditions are such to-day that in many cases first mortgage bonds even of buildings of most conservative finance are available for purchase at figures which vary from 10 to 50 per cent. of their face value.

Hotels were financed in a similar manner and apparently built up with no prospective tenant. In the case of one hotel a ground rent was guaranteed of \$480,000 a year. On the strength of this lease a first mortgage was obtained of six million dollars, a second of three million, and a third of one million, and the hotel is at present being operated by a committee of bondholders on a basis which is showing a mere return of operating costs without sufficient margin to pay the ground rent. The freeholder refuses to take over the hotel for fear that he might be liable to State rates and taxes, which are in arrear two to three years, and the bondholders, therefore, have to carry the responsibility of the property, with the rather remote hope that it may some day show them some slight return for the ten million capital invested.

The calculation of finance is made in the case of a new project on the following basis:—Gross rents are taken, and from the sum so obtained is deducted the operating charge. From the balance is deducted the mortgage interest, and the resulting equity is calculated to carry an interest charge of 6 per cent. plus an amortisation charge which is expected to show redemption of the equity in five years and the mortgage from ten to fifteen years. This means 20 to 25 per cent. on the equity one-third.

#### 5. BANK FINANCE

The cheapest type of finance of this character is usually bank finance, that is, an advance on "overdraft," i.e., a loan given by the bank to a strong borrower, person or company whom the bank considers sound, of high integrity and capable of repaying the loan at any time suitable to the bank.

In finance integrity is in the forefront of all transactions. Since this is so finance lays itself open to the greatest amount of false representation.

Bank finance has certain distinguishing characteristics:—

(a) It is also invariably temporary, i.e., it must be repaid at some fixed period after completion of the building and cannot normally remain as a permanent loan.

(b) It is generally an advance on personal covenant.

(c) It is able to be called up at any moment. Thus, bank finance is only possible to the best class of borrower and its cost to-day is between 4 per cent. and 5 per cent. per annum on the amount involved.

#### 6. FIRST MORTGAGE OTHER THAN BANKS

The method of advancing money on first mortgage is, however, used by many lenders other than banks—insurance companies, trust funds and private people are all willing to lend money on building development in this form. They will lend, however, only to people known personally to them or their surveyor or to individuals of known business capacity.

Much of this finance is subject to special conditions connected with the business of the lender. For example, mortgages from insurance companies usually carry with them the necessity for insurance in the office of the company. Sometimes there is a demand for life insurance upon the lives of the directors equal to the amount of the loan or the demand for a redemption policy or life and redemption policy equal to the amount of the loan.

Trust finance and finance in the hands of private individuals often carries with it payment to the solicitors handling the fund, or to individuals who earn a living by introducing such finance.

In certain cases these fees are earned by a knowledge of the way to deal with a scheme or by maintaining contact with a number of sources of finance which enable the financier to select the most advantageous channels through which finance can be obtained. In others, the fee is claimed under circumstances which are purely fortuitous. The fee, when paid, is generally 1 per cent. on the amount of money found, but the fee may alternatively be paid in shares.

#### 7. MORTGAGES UPON SCHEMES AS DISTINCT FROM INDIVIDUALS

Mortgages can, of course, be obtained upon the securities of schemes put forward by groups of individuals who show clear profits to be earned by a speculation.

#### 8. FINANCE COMPANIES

There are certain finance companies who provide finance. These companies operate upon widely differing arrangements: (a) They may advance to

private owners who want to extend or rebuild their own premises and who can show by trading balance sheets that they have assets and potential development possibilities which form security for the loan.

(b) They may advance merely to any of the groups indicated under headings 5 and 6.

#### 9. FINANCE BY HIRE PURCHASE

1. The owners or prospective developers do not always desire to proceed by bank loan and cash or cash and mortgage, and the state of the money market or the influence of the owner or syndicate is not always strong enough to proceed with finance by public company. In any case, only the largest projects can contemplate public issue prior to erection.

2. Finance must then proceed by other methods.

3. Finance by hire purchase.

A house, a factory owner or business proprietor can obtain the cost of his rebuilding subject to investigation and survey and repay over three or more years, the first payment to take place one or more months after the date of loan. Building societies operate on this method.

#### 10. COMPANY FINANCE

1. In certain cases, finance is found by means of a company flotation—

(a) before building;

(b) after building.

2. Established companies earning substantial and regular dividends can usually raise money for extensions of their premises by means of "a public issue." This money is "underwritten," that is, guaranteed by a finance house before the public is asked to subscribe, and a prospectus is then issued to the public who produce the money.

3. Sound active companies with substantial directorate and shareholders may raise a debenture for building without reference to underwriters or the public.

4. Many public companies are formed after the building is complete and the revenue in existence or guaranteed. In these cases, a balance sheet shows earning capacity value and division or grades of shares. Several sub-divisions of money required are possible:—

(a) Debentures bearing interest at 4 per cent. or 4½ per cent.

(b) Preference shares at 5 per cent. or 5½ per cent.

(c) Ordinary shares, which appropriate the rest of the income and in successful times earn



the greatest profit but in bad times are the first to bear the loss.

Possible proportion of capital :—

*Company No. 1.*

4 per cent. First Mortgage ..	59.40 per cent.
5 per cent. Cumulative Preference ..	10 "
Ordinary .. .. .	30.60 "

*Company No. 2.*

3½ per cent. First Mortgage ..	36 "
4 per cent. First Mortgage ..	20 "
5 per cent. Cumulative Preference ..	24 "
Ordinary .. .. .	20 "

*Company No. 3.*

4 per cent. First Mortgage ..	50 "
5½ per cent. Cumulative Preference ..	25 "
Ordinary .. .. .	25 "

To avoid the risk of partial subscription, underwriting is almost always undertaken, generally at a remuneration of 3 per cent.

#### 11. FINANCE BY PRIOR SALE

A building may be sold to an investment or other company prior to erection, the building owners carrying the risk of completion at less than agreed sale price. If the prospective purchasers are sufficiently strong, it will be possible to borrow practically the whole cost upon the strength of this contract.

#### 12. FINANCE ON ENHANCED LAND VALUE

In certain circumstances finance can be arranged by virtue of the fact that the development about to take place creates an enhanced land value.

- (a) In this case, land is bought for cash.
- (b) The project is planned.
- (c) The enhanced land value is estimated.
- (d) The land is purchased.
- (e) A ground rent is created.
- (f) The new ground rent is sold and under certain conditions paid for as soon as erection starts.
- (g) The land profit thus secured is applied as cash to the finance of the building.
- (h) A mortgage is secured and the building proceeds as in paragraph 4.

#### 13. FINANCE BY INTERESTED PARTIES

Whole or part finance can be secured by each interested party putting up a certain proportion of the money required.

In a typical case, it can be subscribed in cash by—

- (a) Landowner.
- (b) Estate agent.
- (c) Architect.
- (d) Solicitor.

- (e) General contractor.
- (f) Sub-contractors.
- (g) Philanthropists.
- (h) Prospective tenants.
- (i) Suppliers of commodities to prospective tenants.

Each of these parties may have an interest in the building apart from any desire to make a profit from the development.

Many of those enumerated above will draw a fee or profit in addition to the profit they hope to make on the financial side of the transaction, i.e., they provide themselves with work or with a means of selling goods.

Instead of providing the whole in cash, these interested parties may provide between them only the "Equity" and can then proceed as with a mortgage and cash.

In all schemes where people accept a financial risk or advantage for purposes other than a profit on this finance they may endeavour to secure a disproportionate or unjustifiable profit and, therefore, in such schemes there must be complete fairness and balance if success is to be achieved.

#### FEES AND COSTS WHICH ADD TO THE CAPITAL

In all financial schemes there must be fees and expenses which are outside the cost of the project, but which often constitute substantial sums, i.e., fees to—

- (a) Land agent.
- (b) Architect.
- (c) Quantity surveyor.
- (d) Accountants.
- (e) Procurement and finance.
- (f) Management.
- (g) Purchase of interests, e.g., sitting tenants, etc.
- (h) Temporary housing.
- (i) Temporary works for carrying on trade.
- (j) Payment of unemployed staff.

Money idle during building absorbs more money as "Loss of Interest."

Buildings not fully in production suffer temporary loss of trade which involves waste of overheads. Partial occupation frequently incurs the cost of full services.

Any sound scheme must allow for such costs and for wastage over which no one has control.

- (a) Rises in cost of materials.
- (b) Rises in rates of wages.
- (c) New legislation.



- (d) New inventions which it may be desirable to incorporate.

### BAD FINANCE

There are a great many ways in which bad finance may adversely affect the building. A number of these have been included in the foregoing pages. The outstanding items are :—

Under estimating.

Unsuitable expenditure.

Excessive expenditure on the one hand and, on the other, finance which is insufficient for the initial cost of the project or which provides insufficient trading margin which does not allow the project to mature until it is self-supporting.

While this insufficient or unsound finance is bad in individual cases, it becomes extremely serious when it is generally applied. No more striking or effective illustration could be found than that shown by property finance coupled with the rise in land values and the urban development in America during the boom period.

The wealth of America at this time appeared to be inexhaustible and land values rose with enormous rapidity, reaching inconceivable heights. This put a flood of speculators in the building market. Buildings in many cases excellent examples of architecture, but financially representing enormous costs, brought disaster to hundreds of thousands of investors and to thousands of speculators and developers.

This false finance is a sufficient warning to us, and we might almost say very comforting comment on the English method, which always has had and which still persists on the whole in a system of finance which is extremely conservative in its outlook and the basic terms of its procedure. The same level-headedness which gives the English financier a sane and sound outlook gives English buildings a similar

aspect, and although it may prevent them from having the exciting aspect and sumptuous appearance of many buildings erected by other countries it safeguards them from major disasters.

### PART III

### FINANCE AND ARCHITECTURE

Huge expenditure for building is available by means of loan in the form of votes of supply from the Government, overdrafts in the name of a private individual, or investment of existing capital, and side by side with these solid sources of money is the margin put up with the largest risk, that is, money which will first be lost if the project fails.

As with all human endeavours in a highly competitive civilisation, the margin available for success is small, and if the architect controlling the expenditure is wrong in any of the many directions in which error is possible, this marginal money may disappear beyond recall.

Financially, therefore, the architect comes into contact with expenditure in three different forms :—

1. The way in which the cost of his building is to be found.
2. The way in which the expenditure is to be controlled.
3. The precise manner in which the money is to be spent.

This is the order in which finance controls a building, but as the great majority of projects are financed apart from the architect the profession as a whole sees the order reversed and the architect is asked—

1. To prepare accurate estimates.
2. To control expenditure.
3. To spend money wisely and well.

Financially, these three items are a measure of the view of the financial world of sound architecture.

Success in all that they mean will place the architect high in the estimation of his fellow men.

## VOTE OF THANKS

Sir HAROLD BELLMAN, M.B.E., J.P. : I deem it a very great privilege and pleasure to move the resolution that Mr. Bennett be most cordially thanked for what I unhesitatingly describe as a most comprehensive and admirable survey of a very difficult subject. Speaking as a layman, his paper has taught me a new and even more wholesome respect for your profession. It is true that, sitting in this coign of vantage, there were moments during the reading of the paper when I imagined that I saw haloes on the brows of some of the professional members of the audience, but a second glance assured me that these manifestations were merely rings of smoke ; nevertheless the admirable treatment of this subject by Mr. Bennett has shown to those of us who are here as laymen to-night some-

thing of the difficulties—the technical and, at times, almost insurmountable difficulties—which your profession has to encounter. Therefore, as a layman, and speaking on behalf of the other laymen here who have received your courtesy and hospitality this evening, I should like to thank you very cordially indeed for the liberal education we have received.

The provision of finance for building has for some centuries—certainly since the time when Bacon expressed man's delight in building—been a recognised method of investing funds in this country. The letters and memoirs of Tudor and Stuart England which have been preserved often contain references to building finance. Indeed, down to the accession of Queen

Victoria, according to a leading financial historian: "a huge proportion of investment was upon mortgage."

The result of this long, historical development is that an established technique of finance has gradually emerged. Yet, as Mr. Bennett shows, with the exception of assisting house purchase by instalment methods, this form of finance has never been closely or perhaps adequately organised. It is still distinguished, as this paper shows, by the variety of sources which may be tapped and by the extent to which the personal element affects the transaction. In short, it has not, broadly speaking, been rationalised, at any rate not to the same extent as other and more or less allied fields of finance. Certainly there has been nothing—you will note that I exclude house-purchase by instalments—to compare either with the continental mortgage banks or with the American finance houses of which Mr. Bennett has spoken.

It may, I suppose, be a matter of individual opinion whether we have gained or lost in this country by this greater flexibility. The average Englishman is often far happier in such an environment than in any other. Character has a chance which it might not have otherwise; on the other hand, time and money have to be expended on negotiations at many points. At present, whatever the position may have been in the past, there are sufficient funds available to ensure that the market is not entirely a lender's market, though it probably requires a special flair for finance to make the best use of this circumstance.

Whether any sort of rationalisation is actually called for in this field of finance seems to me a very large question. What Mr. Bennett's admirable paper does suggest to my mind, however, is that there is a case for much closer co-operation between finance on the one hand and the architect on the other, with each understanding a little more of the other fellow's problems. Many financiers, despite Mr. Bennett's compliment, do answer to Matthew Arnold's definition of a Philistine, while occasionally—dare I say it in this hall and to this audience?—the architect does have conceptions of finance that suggest Mr. Micawber.

The issues involved are of the first importance. The architect leaves very big footprints in the sands of time. The nation invests annually vast sums in building; I estimate that during recent years we have invested not less than £150,000,000 annually in new houses alone, and I need not remind you that the movement which I am happy to represent, the building societies, has provided something like three-quarters of this sum each year. When all is said and done, in building as well as in everything else, we must cut our coat according to the cloth. To the architect this must often be a very irritating and vexatious restriction, but the client, I imagine, often feels equally irritated and vexed, and is often, if not invariably, equally helpless.

The supreme need here, if the platitude may be excused, is balance; platitude or no platitude it seems to me that balance is certainly required. We are making some slight endeavour, in the face of considerable obstacles, to educate "our masters" in building matters, both aesthetically and in regard to constructional soundness. How far this will go we cannot say, but we hope in the interests of all concerned that it may bring more grist to the architect's mill and that both parties, aided

by balanced conceptions of finance, will consider themselves benefited by the increased co-operation.

It has been a very great pleasure to be here. I do congratulate Mr. Bennett most cordially upon his wholly admirable paper, which I for one have found instructive and excellent in every way.

Sir SAMUEL INSTONE: I regard it as a very great pleasure and privilege to be asked to second the resolution so ably proposed by Sir Harold Bellman. I notice that speeches are to be limited to five minutes, and, as the proposer has taken seven and a half, I take it that you will average them, and that that leaves me two and a half minutes in which to make my few remarks.

I think that this paper has been an education to many of us, and I, at least, as perhaps even more a layman than Sir Harold Bellman, will go away feeling that I have learned a great deal. There is one thing, however, which I regret. As a boy, I had great ambitions to become an architect. I do not know how many architects there are in the country, but, when I hear Mr. Bennett saying that £300,000,000 has been spent in the last three years, and Sir Harold Bellman saying that £450,000,000 has been spent, I cannot help reflecting that that represents anything between £15,000,000 and £25,000,000 in fees to architects. As I say, I do not know how many have to divide it, but I am sorry I did not become an architect!

One thing has greatly impressed me. Many business men and other laymen have had an idea that the architect's charges are on a wrong basis, because the architect is remunerated in accordance with the amount he spends. I hope that this paper will be very widely circulated, because I am sure that many people in this country do not appreciate the efforts that the architect makes to keep expenses down in the interests of his client. If that could be brought home to a greater extent, I am sure that it would increase greatly the esteem in which your already honoured profession is held by many business men in this country.

We all know many of the great buildings that Mr. Bennett has put up. London is changing its face daily. Mr. Bennett's name will go down to generation after generation, because his buildings will last for many hundreds of years, and no doubt those who come after us will say "That is a pre-Bennett building," or "That is an early or late Bennett building."

I have very much pleasure in seconding this motion.

Mr. J. M. THEOBALD (President of the Chartered Surveyors' Institution): I am only a quantity surveyor, and therefore an absolute child in financial matters, but my firm have had the honour of working for Mr. Bennett, and I am simply amazed at the way in which he gets these schemes out. We only have to see that the jobs come out at the figure which Mr. Bennett has shown on paper, and it is not always easy. Mr. Bennett, however, is so clever that clients are always extremely grateful, whatever happens. And now, having lost all Mr. Bennett's work for the future, I think I have done enough damage to my firm, and I had better sit down!

The vote of thanks was carried unanimously, with acclamation.

Mr. BENNETT: Thank you very much.

# SCIENCE AND BUILDING

## EXHIBITION AT THE BUILDING CENTRE

*For the first time an exhibition, representative of the work of all the principal bodies engaged in building research, has been staged in London. It affords an excellent opportunity for architects to become acquainted with this very important work and is one which is not likely to be repeated for some time. The exhibition, which was opened on 1 March by the President of the R.I.B.A., will remain open until 25 March. The hours are from 10 to 6, Saturdays 10 to 1.*

### SCOPE OF THE EXHIBITION

No exhibition could possibly illustrate in any detail all the multitudinous lines of investigation connected with building that are at present being followed by the Department of Scientific and Industrial Research and the Research Associations. Certain salient problems have therefore been selected as typical of the work of each Department of the D.S.I.R. and of the Associations and presented by means of models, specimens, diagrams and apparatus. These selected problems are almost all of daily concern to architects and include such items as sound-resistance, plastering, fire-resistance, domestic heating, timber seasoning, illumination of buildings, and wind pressures on structures.

One of the principal purposes of this exhibition is to indicate to the architect the sources from which he can obtain the information he requires. On many building problems the Building Research Station is the proper authority from which to seek answers. But the Station does not by any means cover the whole field of building practice. That the other sources of information are not well known to the profession is proved by the numerous letters received by the R.I.B.A. JOURNAL office from members seeking advice on technical matters. The answers to more than half these questions could be obtained direct from one of the research bodies and generally the enquiries are merely forwarded to the appropriate one.

### RESEARCH ORGANISATIONS

There are two kinds of research organisation. The first comprises the sections of the Department of Scientific and Industrial Research, which is a Government organisation under the control of the Privy Council. The sections of the D.S.I.R. dealing with building are the Building Research Station, the National Physical Laboratory, the Forest Products Research Laboratory, the Geological Survey and Museum, the Fuel Research Station and the Water Pollution Research Board. These are national institutions supported almost entirely by public funds whose work is carried out solely in the general public interest.

The research associations on the other hand are self-governing bodies carrying out research in the interests of the industries they serve. The information in the hands of research associations is thus for the benefit of

their members, who bear the greater part of the cost of the associations. It is not, therefore, freely available to the same extent as information in possession of sections of the D.S.I.R. The extent to which such information is available to non-members varies with each association.

A distinction should be drawn between the research associations and the propaganda associations. The former, where they undertake bona-fide research, are in a sense "recognised" by the D.S.I.R. and receive a grant from them. The latter are not considered as part of the national research organisation, although many of them collect technical information on the products of the industries they represent for the benefit of architects and the building industry.

### VISITING THE EXHIBITION

The exhibition is not particularly exciting to look at as it consists mainly of groups of specimens. Nor is it easy for the visitor to understand without help what the exhibits are meant to teach. It is important therefore to discuss them with the stand attendants, who are there for the purpose of giving explanations (and, unlike most exhibition attendants, have nothing to sell). They will, for their part, welcome architects' opinions and experience. This exhibition is indeed as much a "get-together" as it is a demonstration of work done. The visitor, if he is to get the best out of the exhibition, should allow himself plenty of time. A superficial examination will be of little use.

### THE CATALOGUE

The exhibition catalogue is more a handbook on building research than a list of exhibits, each of which is the subject of a concise explanatory discourse. The book is in two parts, the first describing the organisation of each research body represented and giving an outline of its work. The second describes the exhibits. It should be very useful as an office reference since it forms a complete guide to building research and indicates clearly which body should be applied to for the answer to a particular question. At the end is a list of addresses and telephone numbers.

The price of the catalogue is sixpence, and we are informed by the Building Centre that they will be pleased to post a copy to any architect who is unable to visit the exhibition on receipt of the sum of eightpence, the extra twopenny being to cover postage.

### THE EXHIBITS

*Workability of Concrete.*—For a number of years it has been known that the strength of concrete depends largely on the water content of the mix. This fact holds good only so long as the concrete is placed so as to contain no entrapped air. Ten per cent. of air voids will give a drop in strength of as much as 55 per cent. Therefore the workability of the concrete

is important, so that with normal tamping as much air as possible is expelled when the concrete is placed. The usual test for workability is the Slump Test. A new test called the Standard Compacting Factor Test has now been evolved. A simple apparatus, of which a sample is on view, is required.

*Water Content of Concrete.*—Accurate proportioning of the water in concrete mixes is usually difficult to achieve because the aggregate contains varying amounts of water. This may be due to rain, a wet site or excavation from a waterlogged gravel or sand pit. An interesting machine has been devised (and is shown in model form) for overcoming this difficulty. A large bucket or skop is fixed so that it can be vibrated by mechanical means. This is filled with aggregate which is inundated with water. The bucket is then vibrated, shaking out the greater part of the water, which escapes through a fine mesh in the bottom, leaving the aggregate with a constant water content. The apparatus can at the same time be used to measure the volume of the aggregate and be placed so as to discharge by tipping into a concrete mixer.

*Lightweight Aggregates.*—Some recently published results on this work have been already reviewed in the R.I.B.A. JOURNAL. Typical samples of lightweight materials are on view with a comparative chart of their more important physical properties.

*Limes and Plasters.*—While most architects are in some degree conversant with the principal sub-divisions of the lime family of plasters, the calcium sulphate group is inclined to be a stranger. The catalogue gives succinct descriptions of the two families, and samples are on view.

*Paint on Plaster.*—Frequent cases of failure have led B.R.S. to undertake thorough research into this matter. They have discovered the principal causes and these are set out in the catalogue, together with some recommendations for avoiding such failures.

*Fire Resistance.* The new Fire Testing Station at Boreham Wood, Elstree, is illustrated by photographs. It is now in full operation, but some time must elapse before publishable results are obtained. The work so far has been mainly concerned with the resistance of various types of floor construction.

*Asphalt and Roofing Felts.* The extensive series of tests now being undertaken by B.R.S. on bituminous materials is illustrated by some specimens of asphalt mastics which have undergone test in the Station's accelerated weathering machine. This highly ingenious apparatus has been described as "designed by Heath Robinson, but made by an engineer"; photographs of it are on view. Specimens of roofing felts exposed to natural and accelerated weathering are also shown.

*The Properties of Units of Building.* A discourse in the catalogue on building units suggests to the reader that he should consider the efficiencies of walls, partitions and roofs as whole constructions. Inevitably individual materials such as bricks must be tested separately, but as

the catalogue says, "The suitability of a building unit for use externally depends, in the main, on the following properties: (1) Compressive strength, (2) moisture movement and drying shrinkage, (3) water permeability, (4) durability." In other words, in a brick wall the type of brick, the wall construction and thickness, the mortar, the finishes should be considered together.

*Natural Building Stones.* The lengthy work of B.R.S. in determining standards of quality in natural building stones is somewhat inadequately represented by illustrations of laboratory test methods. These do not show how the Station has already done a great deal towards ensuring reliability in weathering of Portland and other limestones, by discovering why and how these stones weather and by establishing with the quarry owners systems of sampling.

*Heating.* The work of the Fuel Research Station deserves to be better known to architects than it is. To-day solid fuel firing of heating appliances is gaining ground, and concurrently with it the problem of smoke-abatement is receiving increased public attention.

During the last few years the range and variety of domestic fuels has increased; this is attributable to improved grates and stoves requiring more efficient combustion of gas cokes and anthracites. Automatic stokers have produced a demand for specially sized coals. A selection of fuels is on view.

A recent achievement of the Station is the devising of an apparatus for measuring the smoke emitted from domestic fires. The method is to measure the opacity of the smoke. The system is now being used at the station to test methods and appliances for burning coal smokelessly in open grates.

*Wood Preservation.*—The section of the exhibition occupied by the Forest Products Research Laboratory shows fairly adequately their work relating to building. On the subject of wood preservation specimens that have been in service for a number of years illustrate the two principal methods of preserving timber with creosote, namely, pressure impregnation and the cheaper open tank process.

*Dry Rot.*—The story of the "dry-rot house" is now familiar to architects. As the result of a suggestion by the R.I.B.A. Science Standing Committee a building was erected at Princes Risborough in which were embodied three systems of floor construction representing bad, intermediate and good. Various kinds of timber were used. The floors were artificially impregnated with the spores of dry rot and observations made over a number of years. Results have just been published in an F.P.R. Record which will be reviewed fully in the next number of the JOURNAL.

*Insect Damage to Timber.*—Great progress has been made in recent years in research on the habits and eradication of timber pests. The Laboratory are the first research body to breed and maintain specimens of the death-watch beetle through their whole life cycle. They emphasise, however, the fact that the *Lyctus*



Powder-post beetles are by far the most economically important timber insects in this country and cause extensive losses to the hardwood-using industry.

*Illumination of Buildings.*—This is a section of research (by the National Physical Laboratory) that does not receive from architects the attention it deserves. The study of daylight illumination of interiors, particularly of offices and workrooms, is of great importance in relation to the efficiency of buildings. It is becoming recognised, though slowly, that daylight illumination is every bit as important as other "comfort conditions" such as heating, artificial lighting and defence against noise. Few architects, however, and still less the general public, have any ideas on what constitutes adequate lighting from windows.

The N.P.L. have devised a portable photo-electric meter which by measuring daylight factors permits daylight "surveys" of interiors to be made by one person. Two rectifier photo-electric cells are used; one is placed on the window-sill and the other moved about the room as required. The instrument is now on the market.

*Acoustics.*—Both branches of acoustics, transmission of sound in structures and the design of auditoria, are represented. Some amusing models illustrate the reduction of impact noises (models of human feet are used) by the use of a floating floor. This is an experimental floor designed mainly for use in flat buildings. It consists of an upper floor layer supported by rubber pads on a structural floor layer below. Research on it is still proceeding but the line of investigation it represents promises well.

Some very important work on the sound-insulating values of different partition structures is proceeding. Hitherto it has been impossible to progress beyond the known fact that the sound-insulating value of a partition depends chiefly on its weight per unit of area, commonly called "the mass law." These present researches are seeking an alternative, and so far double partitions promise well. A variety of points in the design of double partitions is being investigated.

*Wind Pressures on Structures.*—The N.P.L. wind tunnels, of which the principal use is the study of aerodynamics, are being employed in a series of tests on models of buildings aimed at discovering actual wind pressures. It is known that the present empirical allowances used in the design of structures are very inaccurate and this research work is likely to lead to their revision.

*Water Pollution.*—Another department of the D.S.I.R. whose work is insufficiently known is the Water Pollution Research Board. A combined exhibit displays their work together with that of the Chemical Research Laboratory. A very interesting exhibit is that on water-softening. A new base-exchange material has recently been discovered. It has been found that some of the synthetic resins can be used not only to remove the salts responsible for hardness but also the

other salts which are left by the usual base-exchange materials.

*Effluents from Milk Products Factories.*—Pollution of rivers and streams by waste waters from dairies and from factories making milk products has become particularly serious during recent years with the development of the milk industry. The number of enquiries on this matter received by the office of the R.I.B.A. JOURNAL reveals that many architects are unaware that the Water Pollution Research Board is the authority from whom information should be sought.

*The Geological Survey and Museum.*—A selection of typical British marbles is displayed in the hope of re-awakening interest in their exploitation. The variety and beauty of these will be "news" to most architects. The catalogue discusses the areas and sources of supply in some detail. The uses to architects of geological maps are also illustrated.

*Exhibits of the Research Associations.*—The Paint Research Station is showing a series of ingenious tests for such matters as the elasticity of paint films, the flow properties of paints and the resistance of paint films to natural weathering and abrasion. These are illustrated by photographic sequences.

The Research Association of British Rubber Manufacturers is demonstrating how scientific test methods are applied to the maintenance and improvement of the quality and durability of rubber products, specially rubber flooring. Examples are given of the uses of rubber as an absorber of vibration and noise.

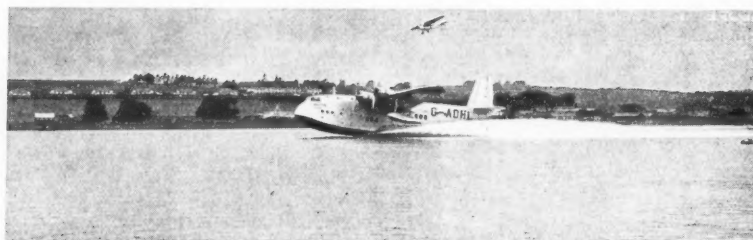
The Iron and Steel Industrial Research Council confine themselves to two principal exhibits. The first is a model of a scheme of multi-storey flats based on the recommendations of the Council for Research on Housing Construction. This shows a variety of uses for steel, including, in addition to the structural framework, steel doors, window frames, window sub-frames, steel skirtings and picture rails. Another model shows some novel sheet steel beams for structural floors.

The second exhibit is of foamed slag, which has already been fully described in the R.I.B.A. JOURNAL. The material is shown in all its forms and there is a new patented system of shuttering which uses expanded metal instead of close boarding.

The British Non-Ferrous Metals Research Association show a test for determining the thicknesses of plating. This has the disadvantage that it destroys the plating and can therefore be only used on samples, but nevertheless it should prove very useful to purchasers of large quantities of plated goods.

The exhibit of the British Cast Iron Research Association shows that a wide range of types is available having greatly varying properties. For example, broken test pieces with tensile strengths as high as 25 tons per square inch are exhibited. The possibilities of cast iron as an external surfacing material for buildings are suggested by sheets enamelled in attractive colours.





[The "Aeroplane"]

## THE AIRPORTS AND AIRWAYS EXHIBITION

The Airports and Airways Exhibition was opened on the afternoon of Friday, 19 February, by the Rt. Hon. Viscount Swinton, P.C., G.B.E., M.C., Secretary of State for Air. Lord Swinton was introduced by THE PRESIDENT, who thanked him for sparing part of his time—so valuable in these days—to come to the R.I.B.A. In reply to any of those who might wonder why architects should organise such an exhibition as this, the President suggested that architects were concerned with anything in the nature of planning, that the R.I.B.A. policy was to take a lead in planning and construction, and that since airports were undoubtedly among the great things of the future they were bound to affect amenities, and it was part of the architect's business to see that amenities were preserved.

LORD SWINTON, in declaring the exhibition open, expressed his pleasure at being able to do so and at having an opportunity of paying his tribute to the organisers. The organisation of the exhibition was a real service, certainly to all those interested technically and commercially in airports and airways, and also to the public. He was delighted to hear that the exhibition was to go on tour and to hear of the extent of response which great cities had made in offering their public galleries for the exhibition.

It was wise of the R.I.B.A. to link airports and airways in the exhibition. All who had to do with air services had one object in view; to make our commercial air service self-supporting. Until it was that, aviation would never attain to its proper position in civil life, nor the airways become the ways of peace. A subsidised undertaking could not exist indefinitely. To become self-supporting airways and airports had to be efficient.

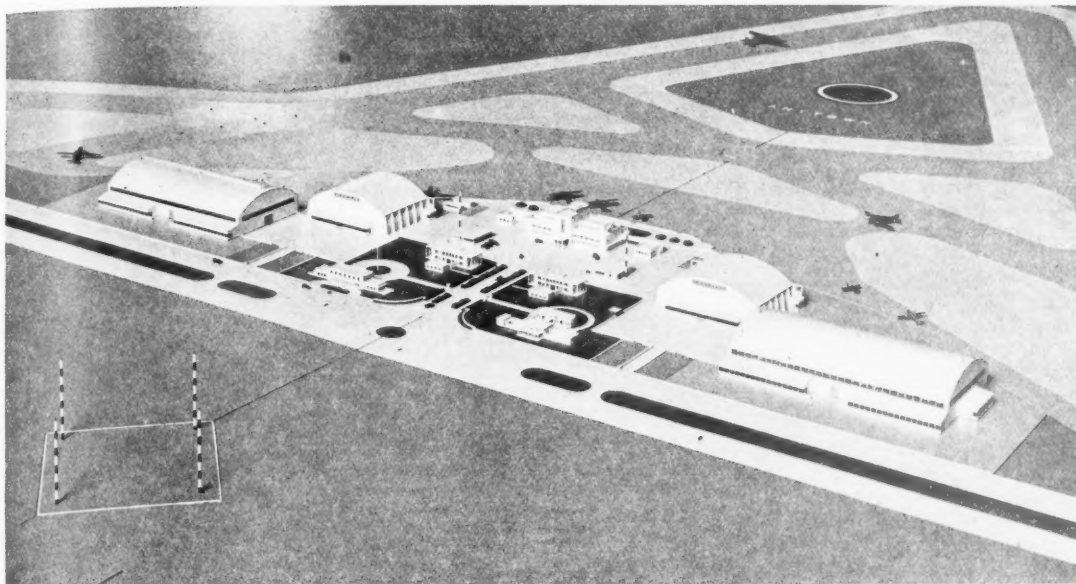
Nevertheless, he emphasised that great municipalities could not expect to run their airports simply as money-making propositions; they could not, for instance, run

their sanitary services to make money, but they were none the less necessary. Though it might be some years before civic airports paid their way, those cities that were building them showed not only vision and public spirit but also a great deal of practical good sense. Airport planning provided opportunities for inter-municipal co-operation. Nothing pleased him more than the way in which certain cities had got together to form common airports and the way in which airport owners had shown themselves ready to pool experience.

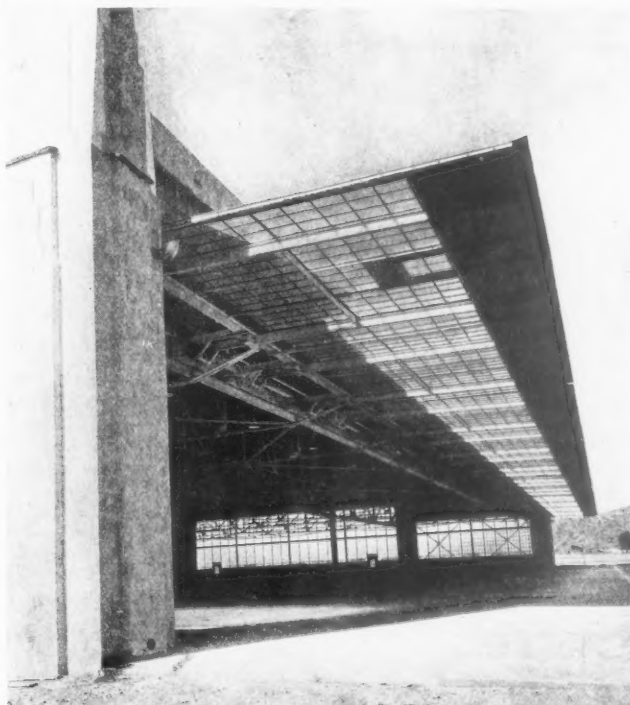
Lord Swinton referred to the comprehensiveness of the exhibition; its representation of progress from the work of pioneers to the latest inventions; its inclusion of all the best that has been done all over the world in technique, construction, lighting, wireless, general convenience and, last but not least, in æsthetic decencies. This last, he suggested, was very important and capable of achievement. Architects more than any other people could show how an essential utility could be a thing of beauty. A beautiful airport was not, he believed, any more costly than one which had had no consideration given to its æsthetic qualities.

In conclusion, Lord Swinton said: "You have performed a very real service, and I am indeed glad to be here to-day not only to see it but to pay my tribute to your Institute for putting that work in hand."

Mr. H. S. GOODHART-RENDEL (Chairman of the Exhibition Sub-Committee), in moving a vote of thanks to Lord Swinton, said that it was sometimes forgotten that the first buildings for railways were almost all by architects, such men as Tite, Mocatta, Hardwick and Dobson, whose works remained to remind us that they were more satisfactory than the buildings produced by the railway companies unaided at a later date. In the first buildings for aviation architects could claim a similar superiority. The vote of thanks was heartily accorded.

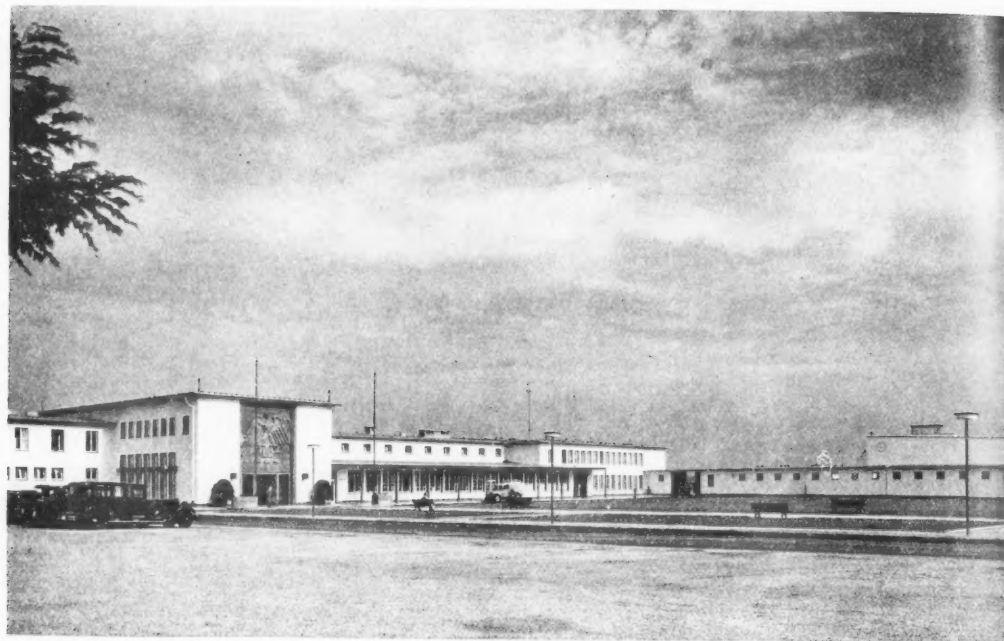


*The central feature of the exhibition, a well-planned model of a modern airport. Completely equipped with an up-to-date system of aerodrome lighting, the model is one of the most popular exhibits. It was designed by two members of the Exhibition Committee*

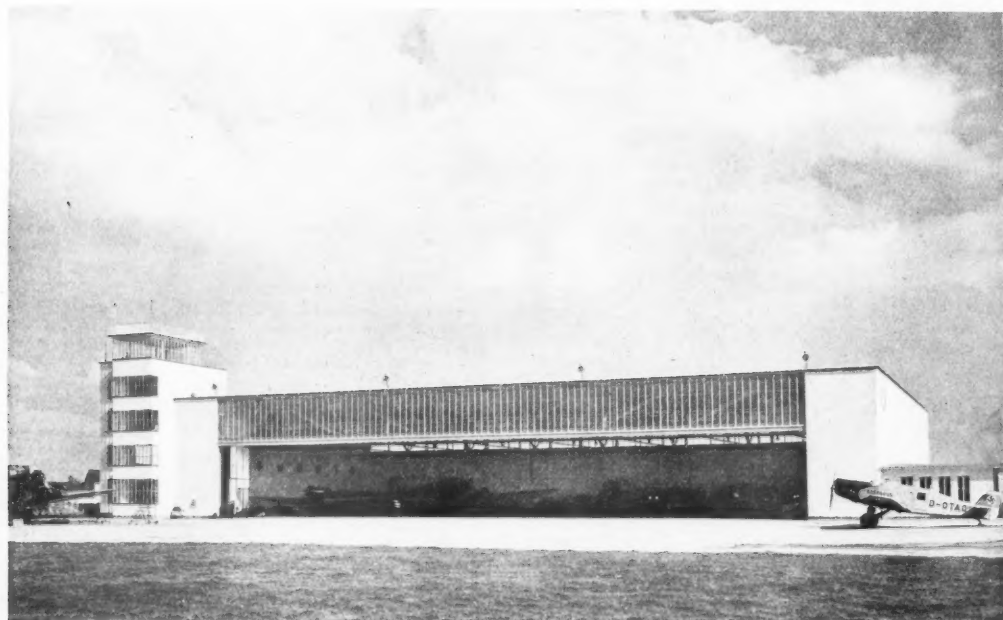


*Right: Cantilever hangar doors, Cleveland, U.S.A. Any part of the 300 ft. continuous door can be raised in one minute*

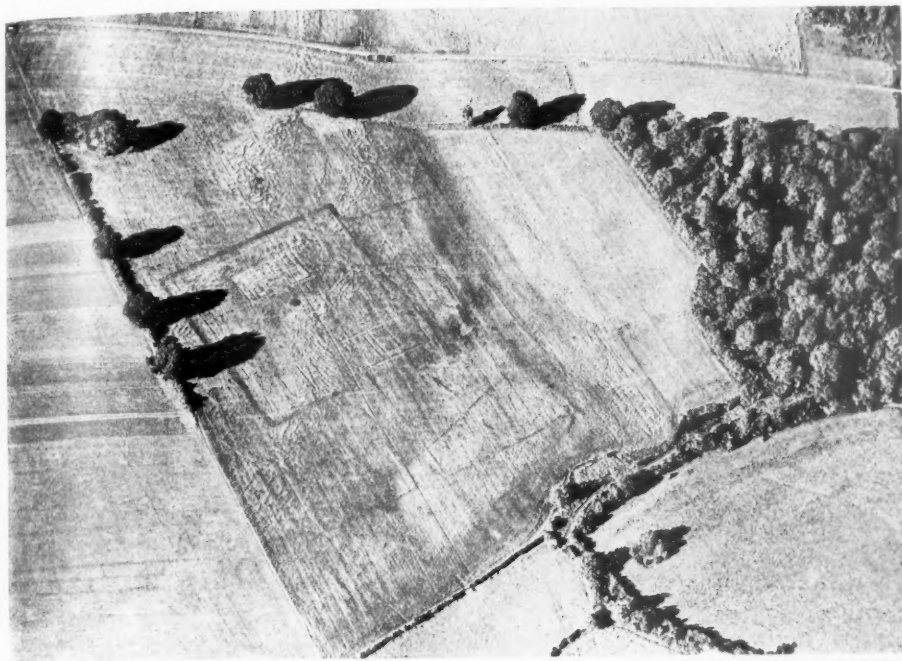
*[Photo "The Listener"]*



*Cologne Airport, by Professor Merhtens, 1935. Above: forecourt to terminal building; below: hangar and control tower*



*Photos: Hugo Schmidt*



[Photo: Major G. W. G. Allen]

*Watts Wells, Ditchley, Oxon. A Roman villa discovered by aerial photography. This photograph, taken before excavation, shows the plan of the villa defined by marks in the crops; the dark spot indicates the position of a well. None of these markings was visible on a ground inspection*



*Right: College Green, Bristol. An example from the aerial photography section showing the site of the new municipal buildings*





A K.L.M. Douglas D.C.2 Air-Liner

## A REVIEW OF THE EXHIBITION

By RODERICK DENMAN, A.M.I.E.E., A.F.R.Æ.S.

Whether it is because the art of functional design makes a strong appeal to aviators and engineers, or whether it is merely that the Committee have done a particularly good job, the Airports and Airways Exhibition (now open to the public at the Institute headquarters) has evoked in one of them at least a feeling of gratitude that architects of all countries should have given us so little that is ugly and so much that is wholly admirable in their work for aviation.

This state of affairs *The Times* has attributed, in some measure at any rate, to the austere influence of poverty on aeronautics. It would surely be pleasanter, and quite as close to the truth, to argue that the architect has kept punctual step with aviation and so has taken the measure of our airport requirements. These, as the catalogue makes clear, are so varied, complicated and compressed as to give the designer

no justification for added ornament. Doubtless the bewhiskered and top-hatted pilots of the early prints would have preferred to stable their sumptuously furnished "aerial steam carriages" in more gaily decorated hangars, but times have changed, and we think (so far as architecture and aviation are concerned) for the better.

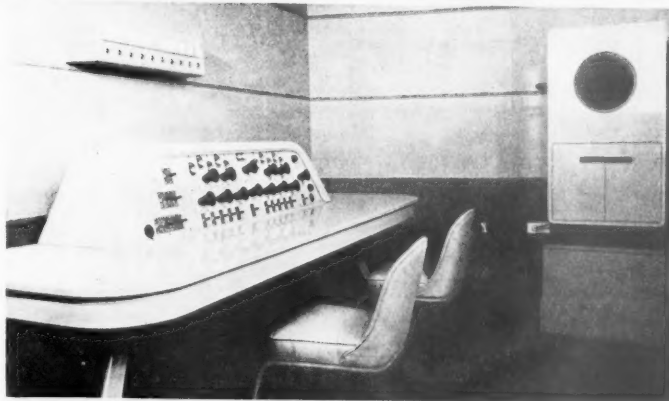
With the exception of a few models, it might appear that photography is the only vehicle employed by the exhibitors. But this would be to ignore the catalogue, which is extremely well done, and serves admirably to weld what are really four separate exhibitions (aircraft, aerodrome layout, airport equipment, and aerial photography) into a coherent whole.

The use of enlargements of a standard size enhances this feeling of unity, which could hardly have been achieved in other ways. It also tends to ensure that

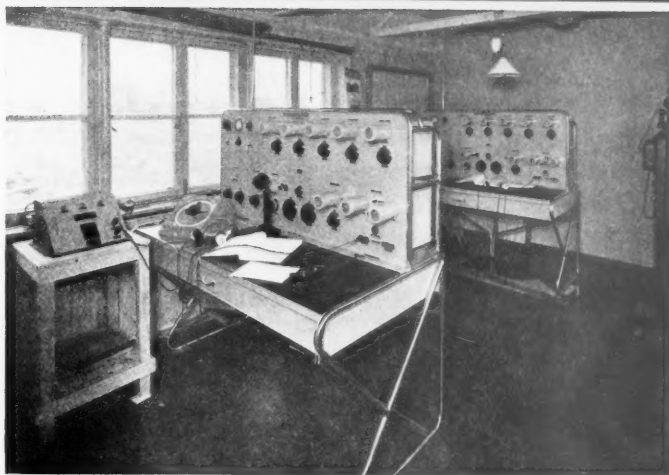
*The control room at Croydon Airport with the control officer's desk in the foreground*

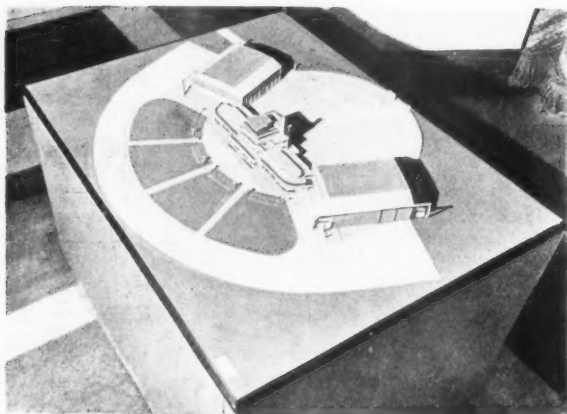


*Dramatic control panel at Broadcasting House (B.B.C. photograph)*



*Marconi direction-finding receivers*

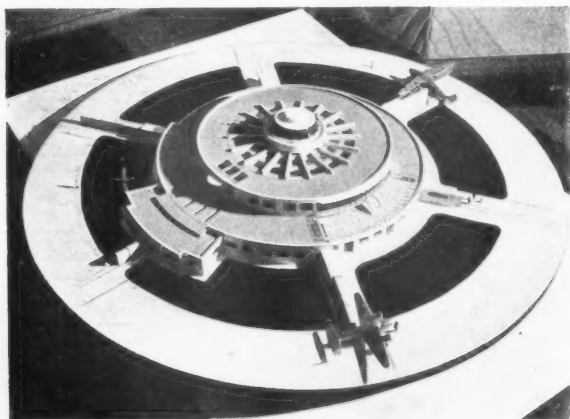




Model of Jersey Airport buildings

proper attention is given to every subject. Whenever actual objects are displayed, attention-holding power is apt to be in proportion to the physical dimensions of each exhibit. The photographic medium, however, is more suited to a popular exhibition such as this than to one intended for specialists. The professional commentator will therefore refrain from expressions of surprise that subjects like that of reverberation control (an important and difficult matter in the design of terminal buildings with their spacious booking halls) have not lent themselves to pictorial illustration. Henceforward he is to keep his eyes firmly on the catalogue.

Of the airports depicted Gatwick (Hoar, Marlow and Lovett), Jersey (Norman & Dawbarn), and the



Model of Gatwick Airport terminal building

model prepared by two members of the Committee are outstanding. To say that Gatwick is unique is not to lavish unthinking praise upon it, for if, like the Albert Hall (which it so mischievously resembles), it continues to be a thing apart, then it will have been a failure. And it will have failed for the same reason that the Albert Hall failed, namely, that it was not truly adapted to the purpose which it was intended to serve.

In Norman & Dawbarn's Jersey airport and in the model designed by Committee members an interesting reconciliation has been made between the requirements for avoiding obstructions to aircraft in flight and those underlying the choice of a site for the four masts which constitute the receiving aerials for the important Adcock direction-finding system. The former consideration must be met by the massing of all obstructions into one or more groups; the latter by having bare level ground for at least 200 yards all round the masts. This conflict is resolved by siting the masts from two to three hundred yards behind the airport buildings, where they are not on any usable line of approach, and where they do not impede the path of circling aircraft. It is then possible to operate the direction-finding apparatus from the control tower, with a notable gain in economy and efficiency.

The photograph of the empty Control Officer's desk (B164) conveys the suggestion that this important individual can never sit still for any length of time. This, if not as it should be, is about how it works out in practice. Compared with so good an example of design as the B.B.C. Dramatic Control Panel (see photograph), it cannot be said that the Airport Control Officer's desk takes one's breath away by its beauty, but at this stage in the development of a new technique these officials probably prefer their own extemporisations to the more studied (and often too inflexible) contributions of the architect. Beauty of design connotes mastery of a problem. The remotely controlled Adcock direction finder is a *fait accompli* (B167). The automatic plotting of aircraft positions is not (B165).

The last of the sub-exhibitions consists of one hundred and sixty aerial photographs, of which the archaeological surveys are the most interesting, and those concerned with mapping and town-planning the most important. But we missed the famous "Tooting" picture, with its row upon weary row of frightful little houses. The photograph of "The Stratosphere" (C126) is, on all counts, a terrific achievement.

Stockholm (C83), by the way, has adopted the clover leaf traffic cross-over. Perhaps, like traffic lights, they may eventually be allowed in England!

The exhibition will remain open daily from 10 a.m. to 8 p.m. (Saturdays 5 p.m.) until Wednesday, 24 March, and will then tour the provinces. It is well worth a visit.

# PLANNING REGULATIONS IN LONDON

## APPLICATION FOR PERMISSION TO DEVELOP PROPERTY IN THE CITY

The following letter and memorandum have been received from the Public Health Department of the City of London.

*Public Health Department,*

*Guildhall,*

*3-2-37.*

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—The Court of Common Council of the City of London decided, by Resolution of 11 June 1936, to prepare a scheme under the Town and Country Planning Act, 1932, with respect to the whole of the City of London, excluding the Inner and Middle Temples. Following a public inquiry, this resolution was confirmed by the Minister of Health on 29 October 1936. From that date the Town and Country Planning (General Interim Development) Order, 1933, by which the City Corporation (as the authority under the Act for the City of London) is empowered to permit the development of the land in accordance with the terms thereof, therefore took effect. It became thenceforward statutorily necessary for intending developers to apply for such permission.

The matter is one of interest to all those concerned with building and property development in the City, and I am accordingly directed by the Improvements Committee, to whom the powers of the Court of Common Council under the Interim Development Order have been delegated, to ask you to bring the attached outline of procedure and requirements to the notice of the members of the Royal Institute of British Architects.

Yours faithfully,

ALFRED T. ROACH,

*Town Clerk.*

### TOWN PLANNING IN THE CITY OF LONDON INTERIM DEVELOPMENT PROCEDURE

*Town and Country Planning (General Interim Development)  
Order, 1933*

In exercise of the powers conferred on him by Section 10 of the Town and Country Planning Act, 1932, the Minister of Health made, on 21 March 1933, a General Order with respect to the interim development of land within the areas to which resolutions to prepare or adopt a scheme apply. For this purpose, "Interim Development" means development between the date on which the resolution takes effect and the date of the coming into operation of the scheme; "development" in relation to any land, as defined by the Act, "includes any building operations or rebuilding operations and any use of land or any building thereon for a purpose which is different from the purpose for which the land or building was last being used."

The resolution of the Court of Common Council became effective on 29 October 1936, and it is thus necessary, in general terms, for an owner intending to develop or redevelop his land or property in the City to apply for the permission of the City Corporation. Development in the following circumstances is, however, permitted pending the coming into operation of the scheme :—

- (i) In the case of an existing building or a building permitted under or by an Interim Development Order made under the Act

- (a) Works necessary for the maintenance of the building ;
- (b) Works of alteration neither affecting the exterior of the building nor proposed in connection with a different use of the building.

- (ii) Development carried out under powers conferred by an Act of Parliament or by an Order which has been approved by resolution of each House of Parliament on land specified in the Act or Order.

In any case of doubt the owner, for his own protection, should make enquiry of the Corporation's officers as to whether or not his proposals come within the above categories before proceeding with the work.

Where a person desires to apply for permission under this Order, it is laid down that he shall apply in writing and furnish to the City Corporation, together with his application, a plan in duplicate sufficient to identify the land to which the application applies and the properties immediately adjacent (called the site plan) and particulars, illustrated where necessary by plans and drawings in duplicate (which should be on linen to ensure durability), requisite to show the proposed development.

Matters will usually be expedited and facilitated if, in the earliest possible stages of the preparation of drawings, the intending applicant consults with the officers of the Corporation in order to ascertain the basic principles on which the Order is being administered. It should be borne in mind, however, that although the Corporation's officers are in a position thus to assist on these principles, any opinion must not be taken in any way as an official consent, and is without prejudice to the decision of the Corporation in regard to the formal application. Any action taken by applicants before the Corporation's decision is given is therefore entirely at their own risk.

It is of the utmost importance to the Corporation's prompt consideration of an application that the information contained therein be full and adequate with regard to principles concerned—space about buildings (including light, areas, etc.) : size, height, design or external appearance : existing and proposed use : building line : traffic circulation and capacity of any loading docks, garage accommodation, etc. The drawings submitted need not have been developed beyond the sketch stage provided the aforementioned features of a proposal are clearly illustrated and adhered to in the ultimate details. The particular circumstances of building in the City also make it desirable that mutual agreements with adjoining owners for light and air or other easements likely to influence the general form of the building, together with a statement as to the owner's interest under which the applicant is acting, be set out in the application.

When a permission is granted it is subject to compliance with any Local Acts, Orders, Regulations, Bye-laws and general statutory provisions in force within the City, and nothing contained in it can be regarded as dispensing with such compliance or be deemed a consent by the Court of Common Council thereunder ; also, any personal or restrictive covenants applying to the land or the rights of any person entitled to the benefit thereof are not modified or affected thereby. Further, it does not relieve the applicant from



compliance with the London Building Act, 1930 (including the obtaining of all necessary consents thereunder) in respect of the proposed works, nor from any requirement as to submission of plans under the Restriction of Ribbon Development (Provision of Means of Entrance and Egress to Buildings) London Order, 1936, and is without prejudice to any requirement which might be specified hereafter by the London County Council under that Order.

The Corporation is now proceeding with the preparation of the scheme, the object of which is to control and guide development and redevelopment in order to secure proper standards of amenity and convenience in the City as a whole. Existing premises and their present use are not affected so long as they remain unaltered, and owners will be afforded opportunity at the appropriate stages to make representations or suggestions on the scheme itself. There is no implication

at the present stage that the Corporation itself will acquire premises or execute works.

The above summarised explanation of procedure under the Town and Country Planning (General Interim Development) Order, 1933, and of the bases on which applications have to be considered is designed to assist those interested in the development of property in the City. To all developers, however, must remain as the ultimate and exhaustive sources of reference on their rights and obligations, the Town and Country Planning Act, 1932 (22 and 23 Geo.5, Ch. 48), the Town and Country Planning Regulations, 1933, and the Town and Country Planning (General Interim Development) Order, 1933 (Statutory Rules and Orders, 1933, Nos. 742 and 236), together with any other Regulations and Orders made by the Minister, all obtainable from H.M. Stationery Office, Kingsway, W.C.2.

## TRAFFIC "RUN-INS" IN THE COUNTY OF LONDON

### COUNTY OF LONDON

#### RESTRICTION OF RIBBON DEVELOPMENT ACT, 1935

#### RESTRICTION OF RIBBON DEVELOPMENT (PROVISION OF MEANS OF ENTRANCE AND EGRESS TO BUILDINGS) LONDON, ORDER, 1936

The following letter was addressed by the R.I.B.A. to the Ministry of Health. The Ministry's reply is appended.

Ministry of Health,  
Whitehall, S.W.

7.12.36

SIR,—I am directed by the Council of the Royal Institute of British Architects to refer to the Ministry's Order No. 1089 which the London County Council are to enforce on and after 1 January 1937.

This Order provides that anyone proposing to build or to rebuild a building in excess of a quarter of a million cubic feet capacity or any building which falls into the category of "a place of public resort" must convince the London County Council that the building in question will not cause an increase in traffic in adjoining streets, or that satisfactory arrangements will be made to limit such interference with the traffic in adjoining streets as might be made by cars taking up or setting down passengers at entrances to the building.

The Council of the Royal Institute realise that the increase in motor traffic has made it very necessary that the obstruction caused by cars waiting outside all types of building should be carefully studied. Nevertheless, the present Order gives no indication of the remedies which the Ministry are now asking the London County Council to put into effect, and the inference which may be drawn from the Order is that in future all large buildings must be provided with forecourts.

The Council of the Royal Institute feel that it would be of the utmost value to architects if the Ministry would give some guidance as to the remedies which it is considered would be effective as otherwise it is feared that the present long delays in the approval of plans by the London County Council may be even more prolonged as a result of the Order.

I am, Sir,  
Your obedient Servant,  
IAN MACALISTER,  
Secretary.

The Secretary,  
The Ministry of Health.

23.12.36

SIR,—I am directed by the Minister of Health to advert to your letter of the 7th instant and to point out that section 17 of the Restriction of Ribbon Development Act, 1935, provides that where plans are deposited for certain types of building and the Local Authority are not satisfied that

- (a) the character of the building is such as not to be likely to cause increased vehicular traffic along any adjacent road, or
- (b) satisfactory arrangements have been or will be made for limiting interference with the traffic along adjacent roads,

they may require the provision and maintenance of such means of entrance and egress, and of such accommodation for the loading or unloading of vehicles, or picking up and setting down of passengers, or the fuelling of vehicles, as they may specify for the purpose of limiting interference with traffic. The Act does not extend to London save in so far as any provisions of it are applied by Orders, and sub-section (3) of section 20 empowered the Minister by Order to confer on the London County Council "the like powers" as are conferred upon provincial Local Authorities by section 17.

Both in London and the Provinces, therefore, it is for the appropriate authority in a particular case to consider whether they are "satisfied" in the terms of the Act or Order (as the case may be) and, if not, what requirements they will, after such consultation as is necessary under the provisions of the Act or Order, specify in that case for the purpose of limiting interference with traffic. Both in London and in the Provinces a person aggrieved by the imposition of any requirement by the authority has a right of appeal (elsewhere than to the Minister). The Council of your Institute will therefore appreciate that it is not practicable, nor would it be proper, for the Minister to express any opinion or make any suggestion in the matter.

I am, Sir,  
Your obedient Servant,  
F. N. EVANS.

## CONFERENCES AND TOURS

In addition to the conferences of the Franco-British Union of Architects and the Fourteenth International Congress of Architects (particulars of which are reported in the Editorial columns of this and the last numbers of the JOURNAL) the following conferences and tours will take place in the near future.

### INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS

PARIS, 5 TO 13 JULY 1937

The International Federation for Housing and Town Planning, London, and the International Housing Association, Frankfurt a/M., are arranging to hold a joint congress in Paris, under the auspices of the French Government, from 5 to 13 July 1937, simultaneously with the International Union of Local Authorities and the International Institute of Administrative Science.

A great exhibition, "Art et Technique dans la Vie Moderne," is being held in the centre of Paris in 1937, which will illustrate the most recent advances in architecture, town planning, transport, entertainment, sanitation, and all the crafts that are employed in the production of those things for which modern civilisation has need.

It is proposed to arrange, in connection with the Congress, certain excursions in the neighbourhood of Paris and two simultaneous study tours, beginning on 13 July, one of about eight or ten days, visiting Lyons, Marseilles, Nice and the Route des Alpes, and another to enable delegates to study the progress in housing and town planning in other parts of the country, and there will also be a number of official receptions.

The congress subjects will be :—

1. *National and Regional Planning.* (Reports by the International Federation for Housing and Town Planning, London.)
2. *The Question of Rent for the Small Dwelling.*  
*The Financing of the Small Dwelling.* (Reports by the International Housing Association, Frankfurt a/M.)
3. *Vertical and/or Horizontal Development.*

On the theoretical side this question will be discussed as to the requirements of the population in respect to open spaces for various purposes, space required between buildings, traffic requirements of different types of zone.

On the practical side the question will be discussed by comparing three different ways of housing a population of 5,000 in a residential quarter of 123.5 acres (50 hectares) surrounded by through roads, the said population in :

- (a) Single family dwellings of one or two floors height ;
- (b) Multi-family dwellings four floors high ;
- (c) "Tower" buildings of any desired height.

In order to make the answers comparable in the various countries, the ultimate costs per square metre of useful area will be computed, after ascertaining the initial costs, management and upkeep costs, and communal facilities and services.

### THE FOURTH INTERNATIONAL REUNION OF ARCHITECTS

The Fourth International Reunion of Architects will take place in Paris from 28 June to 5 July 1937 and will coincide with the International Exhibition of the "Art and Technique of Modern Life."

The Executive Committee is actively pursuing the preparation of this important event. This Committee is composed of representatives of all groups of modern French architects and artists. President : Monsieur Auguste Perret. Members : Jacques Debat-Ponsan, Jean Demaret, Roger H. Expert, Albert Laprade, of the I.R.A. ; George Sebillé, of the Société des Architectes Modernes ; Robert-Mallet-Stevens of the Union des Artistes Modernes ; Ch. Perriand, of the Ciam ; Urbain Cassan, of the Architecture D'Aujourd'hui ; Fernand Leger, of the Union pour L'Art ; Jacques Vienot, of the Association Porza. General Secretary : Pierre Vago.

The British Committee of the International Reunion of Architects was formed in 1935, and is as follows :—President : Howard Robertson, S.A.D.G. [F.] Members : A. Maxwell Allen [A.], A.A. Dip., L. H. Bucknell [F.], Miss E. Denby, J. Dower, M.A., [A.], H. S. Goodhart-Rendel [F.], C. H. Holden [F.], W. D. Hartley [F.], C. H. James [F.], G. A. Jellicoe [F.], A.I.L.A., H. P. Cart de Lafontaine [F.], F. Lorne [F.], B. Lubetkin, Miss Elizabeth Scott [A.], L. W. Thornton White [A.], F. R. S. Yorke [A.]. Hon. Secretary : E. Goldfinger, D.P.L.G., 7 Bedford Square, W.C.1, to whom all enquiries should be made.

### NATIONAL HOUSING AND TOWN PLANNING COUNCIL

REGIONAL CONFERENCES, SUMMER, 1937

During the summer the N.H.T.P.C. will hold a series of regional conferences of local authorities at London, Newcastle-upon-Tyne, Manchester, Leeds, Birmingham, Nottingham, Bristol, Plymouth, Great Yarmouth, Colwyn Bay and Swansea.

The business of the conferences will be to consider :

1. The General Housing situation.
2. The Housing Act, 1936, with especial reference to :  
(a) the Progress of the Anti-Slum Campaign ;  
(b) the Abatement of Overcrowding.
3. The Rural Housing problem, and the provisions of the Housing (Rural Workers) Acts, 1926 and 1931.
4. Town and Country Planning problems, with especial reference to :  
(a) The Town and Country Planning Act, 1932.  
(b) The Restriction of Ribbon Development Act, 1935.  
(c) The Trunk Roads Act, 1936.

Full particulars can be obtained from the Secretary of the N.H.T.P.C., Mr. J. G. Martin, 41 Russell Square, W.C.1.

## INTERNATIONAL HOUSING ASSOCIATION

Headquarters : Frankfurt/Main.  
 Congress Office : 32 Quai des Célestins,  
 Paris IV.

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—We take the liberty of informing you that from 5 to 13 July 1937, in the setting of the Paris World Exhibition, the International Housing Association, headquarters Frankfurt/Main (Congress office: 32 Quai des Célestins, Paris IV) and the International Federation for Housing and Town Planning, headquarters 25 Bedford Row, London, W.C.1, will hold a Congress, at which time also the International Union of Cities, headquarters Brussels, and the International Institution for Administrative Sciences, headquarters Brussels, will meet for their annual conferences.

Of prime interest at the Paris International Exhibition will be the demonstrations of progress and achievement in present-day technics and art, including architecture, town-planning, interior decoration, furniture, home culture and sanitary equipment, whilst every craft and profession in the service of modern civilisation will be represented. We believe, therefore, that the date for our Congress this time has been so happily chosen as to make a visit thereto expedient and profitable for all those connected with housing reform, town planning, architecture, community and local government, etc. Tours of inspection within the bounds of Greater Paris are also being arranged, as well as two special study tours which will enable visitors to gain an impression of the progress of housing and town-planning in France.

The Congress agenda includes the following subjects: Questions of rents and the financing of house-building for the poorer classes (Report of Frankfurt Association); regional and national planning (Report of London Federation); high and/or low building (joint report of both associations).

On all these subjects provincial and general reports will also be submitted.

The International Union of Local Authorities will discuss:

Milk Supply for Towns and Cities, and Abatement of Smoke Nuisance in towns; whilst the International Institute for Administrative Sciences will report on: International Methods.

Further information will be sent to you before long, but we would ask you now kindly to take an early opportunity of notifying your readers of our approaching Congress.

Yours very truly,  
 GENERAL SECRETARIAT.

## A.A.S.T.A. TOURS

1. PARIS WEEK-END VISIT DURING THE INTERNATIONAL EXHIBITION. WHITSUN: Friday Night to Monday Night, 14-17 May. Inclusive price, third-class travel, about £4.

This week-end trip to Paris during the International Exhibition will be at very special rates which could not be offered by any ordinary tourist agency. The party will leave Victoria at 8.20 p.m., Friday evening, arriving Paris early Saturday morning via Newhaven-Dieppe, and arriving back at Victoria at 6.5 a.m. Tuesday morning. Hotel accommodation will include breakfasts and evening dinner, but not lunch. The inclusive price of about £4 (the exact figure to be announced later) will include reserved seats on trains and also admission tickets to the various pavilions of the Exhibition. Second-class travel, including first-class accommodation on the boat, may be reserved for an inclusive payment of 16s. extra. No passports are required.

2. A.A.S.T.A. CRUISE PARTY. 4 SEPTEMBER, FOR 21 DAYS.—S.S. *Strathmore*. £20 and £23 Tourist Class. Calling at Malta, Katakolo, Athens, Istanbul (Constantinople), Rhodes, Catania, Naples. Departing from Southampton and returning to London.

To reserve a berth send £1 deposit at once to the Secretary, the A.A.S.T.A. This will generally be returnable if the intending passenger cannot sail. Open porthole cabins, £23. Non- (or sealed) porthole cabins, £20.

3. AUGUST OR SEPTEMBER, 14 DAYS TOUR TO THE SOUTH OF FRANCE. Visiting Arles, Nîmes, Avignon, Grenoble (or Cannes). Inclusive price about £15.

The exact itinerary and dates for this tour are not yet finally arranged. Further details will be announced later, but in the meantime members interested are asked to send in their names at once to the Secretary, A.A.S.T.A., 113 High Holborn, W.C.1.

## Correspondence

## CORONATION PLANTING COMMITTEE

The following letter addressed to the Secretary is published at the request of the Coronation Planting Committee. Members wishing to communicate with the Committee should do so to 7 Bedford Square, W.C.1.

10.2.37.

DEAR SIR,—This Committee proposes to make representations to county and local authorities throughout the Kingdom so that schemes may be promoted for preserving landscape of special natural beauty for the designing of open spaces for recreation, and the planting of parkways, to mark appropriately the celebration of His Majesty's Coronation.

The School of Planning and Research for National Development, in collaboration with the Technical Sub-Committee, asks you to give any information you may have regarding the acquisition of land for such purposes, and any schemes which

are already under consideration, or which might be stimulated by some official recommendation.

Communications should specify the location of such projects; and give particulars of any steps which may already have been taken under Town and Country Planning Acts, or otherwise, to initiate the schemes.

In view of the urgency of sending out these recommendations we should appreciate an early reply.

Yours faithfully,

MARGORY ALLEN OF HURTWOOD  
 (Lady Allen of Hurtwood),  
 Chairman, Executive Committee.

F. A. A. ROWSE,  
 Principal, School of Planning and  
 Research.

## Book Reviews

### HOUSING—A EUROPEAN SURVEY BY THE BUILDING CENTRE COMMITTEE\*

This is the first of two volumes compiled by a Committee of the Building Centre, setting out the results of what must be the most comprehensive survey of working-class housing in Europe ever undertaken. As the preface makes clear, the book supports no political theory, nor does it offer any solutions for housing problems; it merely records what has been done. It is a survey, pure and simple.

Quite apart from the merits of the book itself, additional interest and value is lent to it by the fact that all the schemes illustrated in it were selected by those responsible for their erection, and so may presumably be taken as representing, in their opinion, their best work.

What prompted the Building Centre to embark upon this immense task is not stated, but anyone interested in working-class housing must be grateful to it for doing so, and especially for the very clear way in which the task has been performed.

The book in form is a model of methodical subdivision. Each country has a section which is subdivided into towns; each town has a section which is subdivided into housing schemes, and, finally, each housing scheme is progressively illustrated from site plan to plans of individual dwellings, and is accompanied by data in tabular form.

Before each country's section there is a note on finance, and before each town's section there are brief general notes on population, climate, situation, industries, wages, open spaces, transport and materials, followed by rather longer notes on housing policy, social services, site and building planning, and a comparative table of the construction and finish of the schemes illustrated.

All the information for each country, town and scheme is in the same order, and the scales of the plans have been standardised so that all comparable plans are drawn to the same scale.

This complete orderliness of arrangement throughout the whole book makes a detailed comparison between the housing schemes of various countries readily possible in a way which before would have involved the investigator in arduous research.

The layout of the book, the type, the plans, are all good and admirably clear, and the photographs which illustrate the schemes are for the most part excellent.

Owing to difficulties due to the differences in conditions, such as local building materials, type of ground, etc., in the various countries under review, and to the

fluctuation in the rates of exchange of the different currencies, the compilers of this book concluded that no useful information could be given about the cost of the schemes which are illustrated.

This is one of the few aspects of the subject which is not touched upon, and while it must be admitted that no general comparison of cost is possible, information of costs would have been interesting within each country. For example, it would be instructive to learn how the cost of, say, the Quarry Hill Scheme at Leeds compares with St. Andrew's Gardens, Liverpool, or Kent House and Chapman House, London, with China Walk, or other brick-built schemes.

The currency difficulty has been overcome in the comparison of rents by relating the average rents of all the schemes to the average wages of unskilled labour. It is an excellent method, and it does show, if these schemes may be taken as typical, that not very much has been done for the unskilled labourer, or as he is generally—rather tiresomely—called, "the lower-paid worker."

In only one of the nine London schemes is the average rent less than a quarter of the average unskilled wage, and in four of them it approximates to, or is actually over, one-third.

Liverpool, with rents of 17 per cent. and 22 per cent. of wages, has got down to more reasonable proportions, and something is done in Leeds and Paris by differential rents, though without careful study the exact effect is rather difficult to ascertain. In some Parisian schemes it is further complicated by the rent being built up by the addition of amounts for fittings, such as shower baths, radiators, etc.

There is so much information in this book, and such variety of comparison is possible, that it is tempting to go picking about just comparing this and that, but it should be carefully studied, for it is only by such study that vital matters, such, for example, as the need for housing standards, become apparent.

Except for such obvious things as floor area and height of rooms, there appears to be an almost complete lack of standards, and even those that exist, as anyone interested in housing in this country knows, have been varied here for none other than financial reasons. On questions such as the density of block-dwelling development, angles of light, recreational space and other equally important matters there is the greatest need of further knowledge upon which standards can be based.

A survey of past work and an appreciation of its

\* Vol. 1.—England, France, Holland, Sweden, Denmark, Spain. la. 4to., 435 pp. London. Building Centre, 1937. 3os.



shortcomings is an almost essential preface to improvement, and it is to be hoped that the Building Centre, by making this survey, will stimulate those responsible for housing as well as providing them with a rod against which their efforts can be measured.

In conclusion, tribute should be paid to the Editorial Committee and those who assisted them for the immense amount of work done in preparing this book. It is fully worthy of all the preliminary boosting it received.

T. S. BARNES [A.]

### PIONEERS OF THE MODERN MOVEMENT\*

When a development of a cultural order has reached what appears to be a synthesis or final standard there is an inclination to think that the outcome of this development has been clear-cut from the beginning, and in retrospect its pioneers seem to have had a clear grasp of the issue and to have been prevented from realising it only by the inertia and obstruction of their times.

This orderliness and deliberateness that history takes on is largely the creation of the historian. It is the inevitable result of the backward view and the deductive method, that is, tracing ancestry rather than tracing descent. Thus, the writers of detective stories, and of plays too, commonly sketch out their plots hind-end foremost and fit the preliminaries to suit the climax. And thus do historians, and especially the historians of "movements," start off with the movement established, and proceed to fit it with an origin, development and pioneers.

Mr. Pevsner's documentary scholarship is, on the whole, an exception to this rule. The historical development of this architecture that we agree, though probably with very different connotations, to call modern was complicated, haphazard and episodic, and though Mr. Pevsner has reduced this chaos to order he has done so without academically making the development appear a largely chronological matter. On the contrary, he shows it to have been as slow and tortuous as the Exodus, a journey of trials and errors, misleading shortcuts, fruitless deviations and occasional glimpses of the Promised Land. Further, he shows it to have been not merely an architectural journey, but one that concerned artists, designers, engineers, industrialists and social thinkers equally.

Briefly, the build of the book is on these lines: a broad elucidation of the position against which Morris reacted and the tracing of how this reaction gradually turned to action of a positive, conscious and liberated order in the works and teaching of Walter Gropius; followed by an examination of the various compromises that intervened—arts and crafts, art nouveau, engineering-sans-architecture, and of the influence of painters such as Cézanne, Rousseau, etc.; and of English pioneer architects—Voysey, Mackmurdo, Ashbee, Townsend, Dunbar Smith and Cecil Brewer; culminating in the establishing of modern architecture and design by Perret and Garnier, Lloyd Wright, Hoffmann, Loos, Behrens, Poelzig and—most maturely of all—by Gropius.

\*PIONEERS OF THE MODERN MOVEMENT. From William Morris to Walter Gropius. By Nikolaus Pevsner. 8vo., 240 pp. London: Faber & Faber, 1936. 10s. 6d.

A historian has inevitably to put himself in the position of an arbitrator settling so-and-so's claim to have taken out the first patent and so-and-so's claim to have realised somebody else's anticipation. It is surprising, therefore, to find with what a large proportion of Mr. Pevsner's pronouncements one is in complete agreement. Indeed, there is little doubt that this book establishes the genealogy of modern architecture and design. His judgment is shrewd and fair, and backed by a knowledge of his material as comprehensive as Mr. Shand's.

It is all the more important for this reason to enlarge upon some points with which one is not in agreement. The importance he attaches to painters like Khnopff, Toorop and Munch and some of the exponents of art nouveau is probably a matter of opinion. Two other points are more serious.

Throughout the book Mr Pevsner, mostly by inference, but here and there by direct statement, gives the impression that he considers modern architecture externally as a style. He is concerned with the appearance of buildings, with buildings as types to be judged by their conformity. To my mind, what differentiates modern architecture from all Renaissance and post-Renaissance architecture is that it is not a style but an organisation. It is easy to distinguish a building whose architect assumes that it is merely a matter of style. Such a building looks like a flat-roofed and externally rendered renovation of something left over from another period, just as so many neo-Gothic houses are obviously Georgian assemblages of rooms encased in an alien shell. No, modern architecture is an organisation in exactly the same way as was Gothic, an organisation of space and structure whose façade is incidental.

The other point arises from this misconception. Mr. Pevsner says at the conclusion of his book: "The artist who is representative of this century of ours must needs be cold, as he stands for a century cold as steel and glass, a century the precision of which leaves less space for self-expression than did any period before." If modern architecture were simply a matter of style, then this would indeed be so. But it is not, and I believe that there is more variety in truly modern building than there ever was, for example, in the eighteenth century. Consider only the work of Le Corbusier, Mendelsohn, Markelius, Oud, Lurçat, Lloyd Wright, Neutra, Gropius, van der Rohe. If by self-expression Mr. Pevsner means an arbitrary effort at doing something different he will naturally find it absent in the work of these architects. But if he means saying what one wants to say as clearly as possible, which surely admits of whatever self-expression can possibly ask for, then

he has failed to understand the work of these architects and the fact that modern architecture stands for liberation from style and façade.

RAYMOND McGRATH [4.]

### CONTEMPORARY DOMESTIC ARTS

DECORATIVE ART, 1937. 32ND ANNUAL ISSUE OF THE STUDIO YEAR BOOK. Edited by C. G. Holme. 4to. x+144 pp. London: The Studio, 1937. 10s. 6d. cloth. 7s. 6d. wrappers.

Domestic architecture always has and presumably always will attract more attention than any other kind of building. Through the building of houses the layman can make his most direct approach to architecture in all its aspects, and in building houses the architect has the liveliest field for experiment. Also in mere quantity domestic building exceeds any other kind. Anyone who wishes to keep his finger on the pulse of modern architectural movements will find the pulse beating most clearly in domestic architecture: the work is generally small enough to allow the architect's individuality to exert itself in a way that is often impossible in larger works, the touch of passing fashions enlivens and gives house-building a particular contemporaneity. There is functional planning in service apartments, humanity in living-rooms, nature in the gardens, and everywhere a demand for decoration and colour.

The historical importance of the present, whether it is good or bad, is excellently reflected in the annual Studio publication *Decorative Art*, though that title does not do justice to the comprehensive character of the book. The 1937 volume fully lives up to expectation. As usual, Mr. Geoffrey Holme's introduction is a lively survey of opinion. A bit self-conscious, perhaps, but it is good reading. The underlying theme is a plea for catholicity of taste, the expression of a desire to admit all comers, functional and *chichi*. Mr. Holme, however, recognises, more by implication than directly, the existence of "the modern house," but refuses to pin himself down to acknowledge that any particular expression is exclusively modern. Nevertheless, he says that "The right way to look at modern design is from the practical angle of what material advantages it provides, not as an almost religious cult to be accepted with awe." Admittedly, the first part of this sentence is in direct opposition to the second part, and may be dogmatic on that account, but surely it overstates the purely functional aspect of domestic building in a way that does not seem consistent with the rest of the introduction or the illustrations. The implication is presumably that "modern" design has to be looked at in a different way to traditional. It is "modern" design that can be or needs to be subjected to the criterion of material needs, and not traditional design. If this is the meaning, an entirely wrong idea of modern architecture underlies it. Facing one another on pages 30 and 31 are two houses. One a vitally modern timber house, "functional" plan, flat roofs, large windows and all. The other is a "Georgian" house in brick. If they cannot be subjected to the same criteria as dwelling places on account of their aesthetic and functional qualities, architectural criticism is more at sea than we thought. The practical and aesthetic elements of building should interlock: it is where they do not, as in the external growth of a scullery on the otherwise symmetrical face of the Georgian house, that the breakdown comes. Modern architects claim that though this breakdown is not

always so obvious as in this particular example it is in fact inevitable. The stylistic coherence of any building is complex and the Studio destroys what truth there is in its tolerant eclecticism by trying to isolate modern architecture into terms of material needs only.

The example given prominence as the first in the book is Mr. Jellicoe's house for Mr. Hayes-Marshall. This is first-class Studio, and the common denominator of the book; suave, luxurious, nothing too much, and nothing stinted, "a sense of ease and spaciousness borrowed from the Regency." It is interesting to note that all but four of almost forty houses illustrated are coloured white externally. By no means all are modern.

The interiors are very interesting, and are well selected and arranged under room types, each introduced by a brief, sensible paragraph analysing needs and tendencies. Among the notable features are: The reticence of light fittings, and, with their reticence, the general improvement in lighting; the almost complete disappearance of "traditional" carpets and the great variety and the freshness of the modern carpet styles; the continued dominance in room planning of the fireplace and the rareness of entirely successful solutions; the tactful avoidance of the most difficult problem of modern room designing, the satisfactory designing of a room to take old furniture. Also the almost complete absence of modern pictures. The Studio particularly might complain at this. There are several hundred photographs of rooms, and after them pictures of pottery and glass, metal ware, lighting, furniture and fabrics. Together they provide the most comprehensive and most encouraging survey, which is as useful to contemporary students as it will be years hence to historians.

### CINEMAS

MODERN CINEMAS. Reprint from *Architects' Journal*. La. 4to. 64 pp. London: Architectural Press, 1936. 3s. 6d.

Cinema designing hitherto has not come within the scope of the competition system. The ownership of most cinemas in England by large financial groups has resulted in the concentration of cinema designing in the hands of comparatively few architects; consequently, the problems of cinema design have not had, nor, it seems, are likely to have, the same general interest to the profession as the design of town halls (the subject of the first volume in the *Architects' Journal* planning series). But the ambitions of individual architects know no bounds; even if few are likely to get cinemas to build, all can hope that they may.

The great interest in cinema building is evidenced by the fact that the original publication of these articles in the *Architects' Journal* Christmas Number 1935 sold out at once. It is due partly to the fact that, whether or not every architect builds cinemas, cinema building is one of the outstanding fields of architectural work. It gives scope for great variety of expression and for the exercise of expert technical ability. Also, the problems of cinema design are not confined exclusively to actual cinema houses. Many theatres and public halls now require provision for cinema installations and the problems of heating, lighting and furnishing are common to many other public buildings.

The book consists of a series of articles appropriately introduced by a foreword by Mr. Sidney L. Bernstein, chairman of one of the big cinema companies.

The arrangement of the book is not clear and the subdivision into articles is rather arbitrary. Mr. Cromie, on the super-cinema, analyses a typical super-cinema plan without venturing on any detailed criticism, but he makes useful generalisations on the equipment and accommodation required. Mr. Alister MacDonald similarly analyses a number of news-reel cinemas, a special problem of comparatively recent development concerning which Mr. MacDonald can speak with authority. Mr. Leathart has a long and careful article on problems of general design, structure and facings. This is followed by twenty pages illustrating eleven recent cinemas of varying size. Each building is well illustrated and the more important facts about it are given concisely. After this, Mr. Walter Goodesmith discusses interior design in general terms; Mr. Morton Shand introduces a series of pictures of four cinemas in Stockholm, Zurich and Pardubitz, Czechoslovakia, but we are not given more than the most superficial information about them; Mr. E. F. Tulley deals with equipment; Mr. C. W. Glover with acoustics in the only article that seriously, if briefly, tackles a technical problem as if it was of more than ephemeral importance. On the whole, the book is chiefly valuable for the plans it gives, which represent adequately current cinema practice. There is no index.

#### A SWEDISH ARCHITECT

BYGGNADEN OCH STADEN. By *Cyrrillus Johansson*. 4to. x+272 pp. Stockholm: Nordisk Rotogravyr. 1936.

This is a collection of drawings and photographs from the practice of a Swedish architect, chiefly composed of schemes and buildings carried out in the city and neighbourhood of Stockholm. The examples chosen cover a period from 1914 to the present day, and include designs for flats, offices, public buildings and bridges. Each example is accompanied by a short description. A final chapter is added dealing with town-planning and communication problems in Stockholm—problems which are in many ways unique, owing to the situation of the city built on its numerous islands.

The architect's personality and preferences are clearly expressed in his designs and in the letterpress, where he sets out his views both on the designs themselves and on the general principles which have guided his work. Herr Johansson has a scholarly style, based largely on the traditions of old Swedish architecture, but alive also to modern needs, and his buildings are without that pugnacious assertiveness typical of many modern "funkist" works. The book is therefore a corrective to some of the rather extreme types which have claimed to represent modern Swedish architecture to the outside world. The author employs brickwork in nearly all his town buildings, obtaining variety and texture by the use of very wide joints. These joints in some instances, notably the Centrum building in Kungsgatan, are as wide as the bricks themselves.

Outside Stockholm the most interesting building in this collection is the Värmland Museum at Karlstad. This is a little building set in a park with galleries ranged round a central court, and fitting harmoniously into its rural surroundings.

The text is in Swedish, but English notes have been added to explain the designs to those who do not know the language. These notes might have been extended to a full translation of

the chapter on town-planning, for Herr Johansson has had long experience and puts forward many original ideas on the subject to which the English notes, as printed, barely do justice.

Both the illustrations and the type are excellent, but more careful proof reading would have reduced the long list of errata—a list which does not include nearly all the misprints—at the end of the volume.

LL. E. WILLIAMS [A.]

#### PRESERVATION OF CHURCHES

THE CASE OF ALL HALLOWS, LOMBARD STREET. SHALL ALL HALLOWS, LOMBARD STREET, BE DESTROYED? Edited by *W. G. Bell, F.S.A., F.R.A.S., and E. Jeffries Davis, F.S.A., for the City Churches Preservation Society*. 1936. Price 2d.

For over a century there have been attacks on the London City churches. The declining population of the City, the increasing site value of the churches and the Victorian dislike of their Renaissance character have all stimulated the attacks. Defenders have always arisen but, nevertheless, fourteen churches have been demolished in the past seventy years and, as recently as 1919, the gradual destruction of a further nineteen was proposed.

This pamphlet was written when the destruction of All Hallows was still a threat, and was one element in the strong fight for its preservation that was put up by the revived City Churches Preservation Society, with the support of nine learned societies and, more important still, the Common Council of the City of London.

A similar situation exists in many other towns, although it has not attracted as much attention. Manchester and Liverpool have been denuded of their old churches and now ten are threatened in Sheffield at one swoop. Unless the vandalism can be checked our big towns will bear no record of the Christian centuries.

All Hallows, Lombard Street, is one of the few London churches which can claim an indisputable Saxon foundation, so that for over a thousand years the site has been continuously used for worship and, like all Wren's churches, it has fittings of much beauty and interest. The altarpiece was described by the late Dr. Philip Norman as "perhaps the best in the City," and the altar table, font, organ case and pulpit are also very fine. John Wesley preached his first extempore sermon from the pulpit.

This little booklet, now, alas, a memorial, is worthy of its distinguished editors. In thirty pages it tells the story of the church and of the demolition proposals, and details the arguments for its preservation, while the Hanslip Fletcher drawing of the interior illustrates its richness.

W. W. BEGLEY [L.]

#### THE TOKYO OLYMPIC GAMES

GENERAL ARCHITECTURAL SCHEME FOR 12TH OLYMPIAD, TOKYO, 1940. Proposed by *Students of Architectural Department, Waseda University*, October, 1936. 4to. 20 pp. Waseda. 1937.

This booklet illustrates designs for all the Olympic buildings on a scale similar to that adopted in Berlin, 1936, though more positively internationally modernist in style. Designs are included for the general plan, the railway station, the general and swimming stadia, the art gallery, open-air theatre and the Olympic village.

# MR. KEEN'S PICTORIAL SURVEY OF OXTED AND LIMPSFIELD

SKETCHES OF OXTED AND LIMPSFIELD. By Arthur Keen [F.].  
Part 2. 1936. 20 Collotype plates, mtd. Published for the  
author by W. W. Sprague & Co., London. 1936. £1 1s. 6d.

Rather over a year ago Mr. Arthur Keen produced the first of two volumes of sketches of Oxted and Limpsfield in Surrey. The second volume, which has now been published, deserves the same unqualified approval that was given to volume one. There can be few examples in the whole of our recent architectural history of an architect spending the years of his retirement to better advantage. Some men, when the time comes for them to hand over the pleasures and anxieties of practice to their successors, relapse into a state of inactive boredom; they do not care for the past—they may feel they have lived in it and know too much of its hardships and evils—they do not like the present, and they dread the future.

But this does not apply to Mr. Keen, who, if he will forgive this personal history, now in retirement in his village of Limpsfield, has turned his energies, which he once applied to public affairs in the R.I.B.A., to public affairs in his own locality. He has made and published these two portfolios of forty drawings of the present state of Oxted and Limpsfield for, we hope, primarily his own pleasure; but they are more than the results of personal recreation. They are drawings which should, and we believe do, excite the people of those places to a fuller awareness of their local architectural beauties. Few of the people who live in either Oxted or Limpsfield can have been born there; probably nine out of ten houses in those places have been built in the last decade for people whose jobs are in London, whose children go to school elsewhere, whose groceries are sent down from a London store, who don't go to church, who don't belong to any local society more communal than a bridge club, and who, in fact, are aliens in their own towns. It is because this state is normal in all the satellite communities round London that work such as this of Mr. Keen is of real lasting social value. So one could in truth go on and entirely forget that first and foremost they are drawings, and as such must be judged.

The twenty drawings are all in much the same style, straightforward pencil drawings, done without any attempt being made to "hit up" effects by heightening contrasts of light and shade or forcing perspective. Their directness and simplicity add to their value as records because, without any further evidence than that given by the drawings themselves, it will be obvious to the historian of the future that the pictures are topographically honest. Mr. Keen's style is not in any way modified by the knowledge that the drawings were to be reproduced. They remain drawings even when reproduced. This, again, is of value because Mr. Keen has not had to sacrifice any of his personal touch, as is often necessary when a draughtsman has worked deliberately for a certain reproduction process. Although the personal touch is there in abundance, it is modestly hidden under a vivid naturalism. Viewpoints are chosen which allow the buildings to be seen to the best advantage without making the inexpert feel that here is someone

sermonizing from stones and bricks and mortar. If there is any sermon, Mr. Keen lets the building tell it in its own words. Some of the drawings stand out and are possessed of pictorial vitality—such as that of Barrow Green Court, chosen as No. 1 in the volume because this house is one of the most interesting in Surrey, and also perhaps because Mr. Keen himself liked the drawing best. An interesting point is that in no drawing is any cloud effect attempted. The only ill result of this is that in those drawings in which there are no definite shadows on land or buildings there is not a cloudless effect but a rather depressing overcast effect. Also the complete absence of human beings, though not so necessary in pictures of buildings all obviously of human scale as it might be in pictures of grander buildings, makes the scenes somewhat cold and deserted. That neither Oxted nor Limpsfield is yet deserted is the *raison d'être* of these drawings. They are constructive, sympathetic, and wholehearted, and are precedents which others might follow—if there are others with Mr. Keen's own high sense of service in retirement.

## A NEW EDITION OF EVERSHED'S QUANTITY SURVEYING

QUANTITY SURVEYING FOR BUILDERS. By Wilfrid L. Evershed.  
Fourth Edition. 8vo. xx + 282 pp. + 12 folded plates.  
London: Chapman & Hall, 1936. 10s. 6d.

This is the fourth edition of Evershed's *Quantity Surveying*, since the book was first published in 1923. In every respect this is what can properly be called a standard text-book, valuable for both students and practitioners. Quantity surveying is one of the most elaborate and most highly specialised of all the sciences connected with architecture. The practice of quantity surveying is properly the concern of the special quantity surveying branch of the surveyor's profession, and there is increasing reluctance on the part of architects even to pretend to understand a science which, if practised properly, must distract from the designing side of architecture. This is not, however, to say that architects must not know a considerable amount about surveyors' methods. Unless they can at least read their own quantities intelligently they will be at a serious disadvantage in any dispute. Also, unless the methods of "taking-off" are understood, it is difficult for an architect to know exactly how best to apply economies in his building.

Evershed's book is a standard guide to the whole practice; it is clearly written and illustrated by many diagrams and tables. As a preliminary there is a chapter on mensuration as applied to quantity surveying, and useful tables of areas and volumes, etc.

The body of the book is in four parts, dealing with "taking-off" and measuring; working up; schedules; and accounts. At the end are twelve folded plates of working drawings taken from the examination papers of the C.S.I. and other institutions. The previous edition only had ten plates. The most important variations from the third edition are those introduced to make the instructions conform to the rules laid down in the Standard Method of Measurement, 1935.



## Review of Periodicals

*Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.*

### SCHOOLS

- ARCHITECTURE ILLUSTRATED. 1937. February. P. 53.  
Council School, Pinner, Middlesex, by W. T. Curtis [F].  
THE ARCHITECT AND BUILDING NEWS. 1937. 26 February.  
P. 270.  
THE BUILDER. 1937. 26 February. P. 469.  
The Girls' Modern School, Bedford, by Oswald P. Milne [F].

### EXHIBITIONS

- L'ARCHITECTURA ITALIANA (TURIN). 1937. No. 1. P. 1.  
Review of competition designs for a national fashion theatre and exhibition at Turin. Good examples of modern Italian work.

### LIBRARIES

- THE LIBRARY ASSOCIATION RECORD. 1937. February.  
P. 56.  
Extensions to Scarborough public library.  
Three recent branch libraries: North Finchley, Brentmet, and Wallsend.

### GOVERNMENT

- LA CONSTRUCTION MODERNE (PARIS). 1937. 21 February.  
P. 348.  
Ministry of Posts and Telegraphs; a large building by J. Debat-Ponsan. Well illustrated with plans.

### CIVIC

- ARCHITECT AND BUILDING NEWS. 1937. 19 February.  
P. 233.  
London Fire Brigade Headquarters, Lambeth, by E. H. Wheeler [F]. Administrative offices, drill ground, workshops, training school, and residential quarters. Steel frame and brick. One of the largest and most important L.C.C. buildings.  
ARCHITECT AND BUILDING NEWS. 1937. 19 February.  
P. 245.  
Court House at Tottenham, by W. T. Curtis [F]. Four courts, including a small juvenile courtroom.  
ARCHITECTURE ILLUSTRATED. 1937. February. P. 39.  
Council Offices, Welwyn Garden City, Herts, by Elsom and Stone.

- JOURNAL OF THE INSTITUTE OF JAPANESE ARCHITECTS (TOKYO). 1937. January. P. 126.  
The Imperial Diet (Parliament) Building, Tokyo. Grandiose Western planning.

### CIVIC MEMORIALS

- BAUGILDE (BERLIN). 1937. 15 February. P. 147.  
An interesting review of recent work by the German War Graves Commission.

### SHOPS AND RESTAURANTS

- ARCHITECTS' JOURNAL. 1937. 18 February. P. 315.  
The planning of shops. Floor and wall coverings.  
ARCHITECTURE ILLUSTRATED. 1937. February. P. 49.  
Lewis' department store, Leicester, by G. de C. Fraser [F].  
ARCHITEKTEN (HELSINGFORS). 1936. No. 12. P. 177.  
Shop premises at Kotka, by Erkki Huttunen.

- BYGGMÄSTAREN (STOCKHOLM). 1937. No. 3. P. 33.  
A large snack-bar restaurant, Stockholm, by Sven Markelius.  
BAUWELT (BERLIN). 1937. 11 February. P. 5.  
Restaurant over an ancient riverside wall on the Rhine, by Hans Schumacher.  
L'EPOQUE (BRUSSELS). 1937. No. 1. P. 367.  
The design of curved non-reflecting show windows, article by R. Swiestra.

### INDUSTRIAL

- ARCHITECT AND BUILDING NEWS. 1937. 26 February.  
P. 265.  
Printing works for Odhams, Ltd., by Sir Owen Williams.  
LA CONSTRUCTION MODERNE (PARIS). 1937. 21 February.  
Pompes Guinard factory at Saint-Cloud, by M. Montel.  
BYGGMÄSTAREN (STOCKHOLM). 1937. No. 4.  
Reviews of some modern Danish factories.

### TRANSPORT

- BOUWKUNDIG WEEKBLAD ARCHITECTURA (AMSTERDAM). 1937. 13 February. P. 66.  
K.L.M. workshop at the Schipol airport.  
ANNALES DE L'INSTITUT TECHNIQUE (PARIS). 1936. November-December.  
Large reinforced concrete bridges, including the Roche-Guyon bridge, by M. Boussiron.

### HOSPITALS

- ARCHITECT AND BUILDING NEWS. 1937. 26 February.  
P. 273.  
Fuad-el-Awal hospital, Cairo, by Nicholas and Dixon-Spain [FF]. General layout, nurses' home, ward unit, operation block and out-patients' clinic are illustrated.  
ARCHITECTURE ILLUSTRATED. 1937. February. P. 51.  
Surbiton Hospital, Surrey, by Wallace Marchmont [F].  
NOSOKOMEION (STUTTGART). 1937. No. 1. P. 75.  
"Proposal for a central hospital in Stockholm." Article by Hjalmar Cederström, with explanatory illustrations of a plan produced after very thorough investigations into hospital functions by many experts.  
BATIR (BRUSSELS). 1934. 15 May.  
This issue is entirely devoted to a review of hospital schemes and to a useful series of articles on the design of hospitals.  
BATIR (BRUSSELS). 1935. October.  
Articles on hospitals and the principles of hospital architecture, and a review of the George Eastman dental institute, Brussels, by Michel Polak and Alfred Hoch.

### SPORTS BUILDINGS

- LA CONSTRUCTION MODERNE (PARIS). 1937. 14 February.  
P. 324.  
Large bathing centres, with special reference to that at Toulouse. Article by C. E. Sée.  
BYGGMÄSTAREN (STOCKHOLM). 1937. No. 3. P. 29.  
A milk bar and children's bathing pool, Stockholm, by Holger Blom.

BATIR (BRUSSELS). 1934. 15 June. P. 715.  
A comprehensive review of some recent swimming baths and bathing centres.

## THEATRES AND CINEMAS

GAZETTE DES BEAUX ARTS. 1937.  
"Les Projets de Gabriel pour L'Opéra de Versailles" by Pierre Pradel.

BYGGE KUNST. (OSLO). 1937. January. P. 3.  
Competition designs for administrative offices and cinema at Drammen.

## RELIGIOUS

THE BUILDER. 1937. 26 February. P. 466.

Cairo Cathedral, by Adrian G. Scott [F.].

DESIGN AND CONSTRUCTION. 1937. February. P. 132.  
Special section on churches, with many recent examples at home and abroad.

GAZETTE DES BEAUX-ARTS. 1937. February. P. 83.  
"The sculptured doorways at Laon Cathedral," by Elie Lambert.

## DOMESTIC

ARCHITECTURE ILLUSTRATED. 1937. February. P. 45.  
Flats at Roehampton, by Minoprio and Spencey [A.A.].

THE BUILDER. 1937. 19 February.  
Housing Scheme, Clapton Common. Four blocks of flats by Messrs. Joseph.

ARCHITECT AND BUILDING NEWS. 1937. 19 February. P. 240.

Houses at Los Angeles, by R. M. Schindler. Stuccoed timber on a reinforced concrete substructure.

BAUWELT (BERLIN). 1937. 18 February. P. 1.  
Block of flats of interesting design, Berlin, by Paul Baumgarten.

Le "Bel-Air Metropole" at Lausanne. A large steel-framed block of flats and cinema, by A. Laverrière.

LA CONSTRUCTION MODERNE (PARIS). 1937. 14 February. P. 318.

Children's home at Villard-de-Lans, by Pouradier-Duteil.

## GENERAL

ARCHITECT AND BUILDING NEWS. 1937. 19-26 February.  
"Staircases and Handrails." Continuation of series of articles by T. Richie [A.].

JOURNAL OF THE NATIONAL SMOKE ABATEMENT SOCIETY. 1937. February. P. 117.

Smokeless Equipment in housing schemes. Report on recent questionnaire to local authorities.

# Accessions to the Library

1936-1937-V

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Any notes which appear in the lists are published without prejudice to a further and more detailed criticism.

Books presented by publisher for review marked

Books purchased marked

\*Books of which there is at least one copy in the Loan Library.

R.  
P.

## ARCHITECTURE

SPON, publ.

Spons' Practical builders' pocket-book.

7th ed. 6½". Lond. 1937. 8s. 6d. P.

## EDUCATION

BRITISH ASSOCIATION FOR COMMERCIAL AND INDUSTRIAL EDUCATION

Report of an inquiry into vocational education after general education up to the age of sixteen.

pam. 8½". Lond. 1936. 6d. R.

## HISTORY

POTTER (FRED)

The Influence of northern Italian Romanesque architecture on the development of later mediæval building in France and England. (Banister Fletcher Essay, 1936.)

typescript, D. & folding D. and maps. 13½". 1936.

Presented by the Author.

SCHUMACHER (FRITZ)

Rundblicke [panoramas]. Ein buch von reisen und erfahrungen [of travels and impressions].

8½". 252 pp. Stuttgart & Berlin: Deutsche Verlags-Anstalt. [1936.]

Presented by the Author [Hon. Corr. Mem.].

ROUX-SPITZ (MICHEL)

Réalisations.

Vol. I. 1924-1932. 12½"×9½". Paris: Vincent, Fréal. [1936 or -37.] 18s. P.

## DRAWING AND PHOTOGRAPHY

HOLMES (JOHN)

\*Applied perspective.

11"×8½". 55 pp. Lond.: Pitman. 1937. 6s. 6d. R. & P. (3).

R.I.B.A.: CAMERA CLUB

Inaugural exhibition . . . 1936. Catalogue.

dupl. typescript. 13½". 1936.

## PROFESSIONAL PRACTICE

PARRY (RICHARD) and HOWES (A. B.)

\*The Law of easements: etc.

3rd ed. By David Bowen. 8½". Lond.: Estates Gazette. 1925. 12s. 6d. P.

For Loan Library.

SPON, publ.

Spons' Architects' and builders' pocket price book. 1937.

64th ed. 6½". Lond. 1937. 5s. R.

WATSON (W. E.)

\*W— on contracts.

80. Lond. 1930.

EMDEN (A.) and WATSON (W.E.)

\*E— and W—'s Building contracts and practice. 5th ed. of Emden's Building contracts, by W. E. W—.

1a. 80. Lond. 1932.

—Extra copies for Loan Library.

—Both presented by the son of the late Mr. McArthur Butler.

## CHARTERED INSTITUTE OF SECRETARIES

Royal charter. By-laws. Examination regulations. List of members. 1934-1935.

7". [Lond. 1934.] 2s.  
Presented by the son of the late Mr. McArthur Butler.

BUILDING TYPES  
(CIVIL)

KAGANOVICHA (L. M.)

Arkhitektura Moskovskogo Metro. N. Y. Kolli and S. M. Kravets, eds. (Moskovskii Metropoliten, series.)  
12". 196 pp.+2 pls. Moscow: Akademii Arkhitekturi. [193-.]

Presented by Dr. Nicholas Colley, Professor at the Moscow Institute of Architecture.

## INDUSTRIAL WELFARE SOCIETY

Industrial welfare and personnel management, *journal*. (Jan.)  
[With art. Modern industrial architecture, by C. C. Handisyde.]  
9 $\frac{3}{4}$ ". Lond. 1937. R.

## ARCHITECTS' JOURNAL

\*[Special number.] Cinemas. (7 Nov.)  
12 $\frac{1}{2}$ ". Lond. 1936. 1s. P.  
For Loan Library.

TOKYO: WASEDA UNIVERSITY—ARCHITECTURAL DEPARTMENT  
General architectural scheme for 12th Olympiad, Tokyo, 1940.  
10 $\frac{1}{4}$ ". 12 pp.+20 pls. (backed). Tokyo. 1936. R.

BELL (W. G.), COTTRILL (F.), and SPON (CHARLES)

London Wall through eighteen centuries. (Council for Tower Hill Improvement.)  
8 $\frac{3}{4}$ ". x+12 $\frac{1}{4}$  pp.+folding map. Lond.: Simpkin Marshall. 1937. 3s. 6d. P.

## (RELIGIOUS)

## ST. PAUL'S ECCLESIOLOGICAL SOCIETY

\*Transactions. Vol. x—Pt. 3.  
1937. 10s. R (2).

Including:—

Richardson (E. A.). The treatment of the reredos.  
Henderson (A. E.). Plan of Glastonbury Abbey Church . . . restored, etc.

## PERKINS (JOCELYN)

\*Westminster Abbey the Empire's Crown.  
7 $\frac{1}{4}$ ". 319 pp.+pls. Lond.: Duckworth. 1937. 7s. 6d. P (2).

## KNOWLES (W. H.)

The Black Friars at Gloucester. (From Trans. Bristol and Glos. Archaeological Society, vol. 54.)

pam. 8 $\frac{1}{2}$ ". n.p. 1932.  
Presented by the Author, F.S.A. [Ret. F.].

## (EDUCATIONAL)

## OXFORD SOCIETY

Oxford, *journal*. Special number. (Feb.) [Appeal; new Bodleian and science buildings.]  
11 $\frac{1}{4}$ ". Oxford: U.P., for the Society. 1937.  
Presented by Miss Jane Lidderdale.

## (DOMESTIC)

## BEMIS (A. F.)

The Evolving house.  
3 vols. 9 $\frac{1}{4}$ ". Cambridge, Mass.: Technology Press.  
[1933-36.] £2 2s. the 3. P.  
Vol. i: A History of the home. By A—F—B— and John Burchard, 2nd.  
Vol. ii: The Economics of shelter.  
Vol. iii: Rational design.

## THOMPSON (A. HAMILTON)

\*The English house. (Historical Association pamphlet, No. 105.)  
pam. 8 $\frac{1}{2}$ ". Lond.: G. Bell. 1936. 1s. R. & P.

## ARCHITECTURAL REVIEW

\*[Special number.] The Modern English house. (Dec.)  
14". Lond. 1936. P. (3).  
For Loan Library.

ARCHITECTS AND TECHNICIANS ORGANISATION: HOUSING GROUP  
[Reports, etc.]

dupl. typescript. 1937—

## NATIONAL HOUSING AND TOWN PLANNING COUNCIL

Annual conference of local authorities in Yorkshire . . . 1937.  
[Agenda.]

pam. 13 $\frac{1}{4}$ ". Lond. 1937. R.

## BUILDING CENTRE

\*Housing. A European survey, etc.  
Vol. i. 11". Lond. [Rolls Ho. Pubg. Co.] 1936.  
£1 10s. R. & P. (2).

## MINISTRY OF HEALTH

Housing, England. Overcrowding and miscellaneous forms.—  
The H— Act (O— and M— F—) Regulations, 1937, etc. (Statutory  
Rules and Orders, 1937, No. 80.)

pam. 1937. 2d. R.

—, Public right of way extinguishment.—H— Act (F— of  
P— R— of W—) Regulations, 1937, etc. (S. R. & O., 1937, No. 79.)  
pam. 1937. 1d. R.

## BOURNVILLE

Reconditioning slum properties . . . carried out by the B—  
Village Trust Architects' Department for the Birmingham Copee  
House Improvement Society, Ltd.

pam. 8 $\frac{1}{2}$ ". Bournville: Pubn. Dept. [1937.] R.

## KNOWLES (W. H.)

The Castle, Newcastle upon Tyne. (From *Archæologia Aeliana*.)  
9". 51 pp.+folding pls. Newcastle-upon-Tyne. 1926.  
Presented by the Author, F.S.A. [F.].

## ARCHITECTURAL FORUM

\*[Special number.] Small houses. (Nov.)  
11 $\frac{3}{4}$ ". New York. 1936. (4s.) P.  
For Loan Library.

## DETAILS, FITTINGS

## DIRECTIONS

\*Directions for the use of altar societies and architects.  
4th ed. 8 $\frac{1}{2}$ ". xiv+66 pp. Lond.: Burns,  
Oates & Washbourne. 1933. (2s. 6d.) P.

## ALLIED ARTS AND ARCHEOLOGY

## STUDIO, publ.

\*Decorative art. 1937. C. G. Holme, ed.  
11 $\frac{1}{2}$ ". Lond. 1937. 10s. 6d. R. & P.

## COUNCIL FOR ART AND INDUSTRY

Design and the designer in industry.  
9 $\frac{3}{4}$ ". 63 pp. Lond.: H.M.S.O. 1937. 1s. R.

## BARR (A. H.), junr., editor

Fantastic art. Dada. Surrealism.  
10". 20 pp. 248 pp. New York: Museum of Modern Art:  
Lond.: Geo. Allen & Unwin. 1936. (12s. 6d.) P.

## BEBLO (HANS)

Handwerksn.öbel. Formgebung und konstruktion.  
Heft 1: Tische [tables]. Stuttgart. [1936.] (6s.) P.

## ROYAL SOCIETY OF ANTIQUARIES OF IRELAND

Journal. Vol. lxxvi, pt. ii.  
31 Dec. 1936. 10s. 6d. R.

## SUSSEX ARCHEOLOGICAL SOCIETY

S— A— Collections. Vol. lxxvii.  
1936.

SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES  
The Journal of Hellenic studies. Vol. lvi, 1936, pts. i & ii.  
1936, 1937. £1 1s. each. R.

Pt. ii includes:  
Megaw (H.). Archaeology in Greece, 1935-1936.

SOCIETY FOR THE PROMOTION OF ROMAN STUDIES  
The Journal of Roman studies. Vol. xxvi, 1936, pts. i & 2.  
[1936, —37.] 15s. each. R.

GLOUCESTER: GLOUCESTER ROMAN RESEARCH COMMITTEE  
Report for 1934. By W. H. Knowles and L. E. W. O. Fullbrook-Leggatt. (From Trans. Bristol & Glos. Archaeological Society, vol. 56.)  
pam. 8½". n.p. 1934.

Presented by Mr. Knowles, F.S.A. [Ret. F.].

### BUILDING SCIENCE

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH:  
BUILDING RESEARCH BOARD  
Report . . . for . . . 1935.  
1936. 3s. 6d. P.

### MATERIALS

AMERICAN ARCHITECT, *journal*  
\*[Special number.] Prefabrication. (Sept.)  
12". New York. 1936. (4s.) P.  
For Loan Library.

DIRECTORY OF QUARRIES, CLAYWORKS, SAND AND GRAVEL  
PITS, &C.  
— (Biennial.)  
7th ed. 1937. 6s. R.

### CONSTRUCTION

BRITISH STANDARDS INSTITUTION  
British standard specification:—  
No. 65 . . . for salt-glazed ware pipes, etc.  
1937. 2s. R.

KNOOP (DOUGLAS) and JONES (G. P.)  
\*An Introduction to freemasonry.  
74". vii+136 pp. Manchester:  
U.P. 1937. 3s. 6d. R. & P.

### SANITARY SCIENCE AND EQUIPMENT

ROYAL SANITARY INSTITUTE  
Kalendar. Year 1937.  
1937. 5s. R.

BRITISH STANDARDS INSTITUTION  
British standard specification:—  
No. 722 . . . for borehole and well pump tests.  
1937. 3s. 6d. R.

MECHANICAL WORLD, *publ.*  
\*Electrical Year Book.  
30th year. 6¼". Manchester. 1937. 1s. 6d. P.  
Older editions in Loan Library.

NATIONAL SMOKE ABATEMENT SOCIETY  
Annual report: 7th [for July 1935-June 1936].  
1936. R.

BRITISH STANDARDS INSTITUTION  
British standard specification:—  
No. 530. British graphical symbols for telephony, telegraphy  
and radio communication.  
1937. 2s. R.

### TOPOGRAPHY

LONDON TOPOGRAPHICAL SOCIETY  
L—T—Record. Vol. xvii. Including 32nd-35th annual reports.  
1936. R.  
Including: The University Site, Bloomsbury.

MARSHALL (C. J.)  
A History of the old villages of Cheam and Sutton, etc.  
8½". (vii)+107 pp.+pls. Cheam:  
Cryer's. 1936. 2s. 6d., 3s. 6d.  
Presented by the Author [Ret. F.].

TOWN AND COUNTRY PLANNING AND PRESERVATION  
BEAUFY (S. L. G.)  
\*Six aspects of town planning.  
7". Lond.: P. S. King. 1932. 3s.  
Presented (2) by the Author [A.].

COLLINS (H. J.) and HART (C. A.)  
Principles of road engineering.  
9". xvi+628 pp.+front.+xx pls., some folding. Lond.:  
Arnold. 1936. £2 10s. P.

WINCHESTER: TOWN PLANNING ARCHITECTURAL SUB-  
COMMITTEE  
Notes on the design of smaller buildings. (City of W— (Special  
areas) and W— & District T— P— Schemes.)  
pam. 1931.  
Presented by the son of the late Mr. McArthur Butler.

### DRAWINGS AND PHOTOGRAPHS

HAWKSMOOR (NICHOLAS), *del.*  
Westminster Bridge. Elevation of one arch.  
Ink and wash D. 1735/36.  
Presented by Mr. J. L. Douthwaite, Librarian to the City Corporation.  
JACK (GEORGE), *del.*  
Designs for war memorial panels, stained glass, and mosaic.  
14 sheets. Pencil and coloured D. [18—].  
Presented by Lord Ferrers.

WEBB (PHILIP), *del.*  
Coneyhurst, near Ewhurst; Clouds, East Knoyle; other  
country houses, offices, and unidentified.  
59 sheets. Working D. 1874/98.  
Presented by Lord Ferrers.

MILLARD (W. J. N.), *del.*  
Chingford Old Church. 2 exts., 1 int.  
3 sheets. Water-colour D. 1878.  
Presented by Mr. C. C. Winnill [F.].

PATERSON (ALEX. N.)  
Shrewsbury: market hall; Naples: S. Chiara, tomb; Rome:  
S. Clemente, ambo.  
3 sheets. Pencil and colour D. n.d. and 1889.  
Presented by Prof. T. Harold Hughes [F.].

BATH, *Somerset*  
Maps, views, and views of buildings.  
50 sheets. Photos. of D. v.d.  
Presented by Mr. Robert Atkinson [F.].

INMAN (W. S.)  
— [F.], 1835-79. Portrait.—Pickersgill, pinx.  
Phot. of Oil Painting. n.d.  
Presented by Mr. David Minlore.

SIRR (HARRY), *del.*  
Rochester: Eastgate House. Int. details.  
Pencil D. 1887.  
Ashburnham House, Westminster. Measured drawings. (Some  
accompanied article in R.I.B.A. JOURNAL, 8 Jan. 1910.)  
6 sheets. Reprods. of Ink D. 1882, &c.  
Metal work: Belgium. (Chiefly door furniture: Bruges.)  
27 sheets. Pencil Sketches. [18—].  
—All presented by the draughtsman [Ret. F.].

POYNTER AND WENYON, *architects*  
Society of Architects' war memorial tablet, No. 28 Bedford  
Square, London.  
Phot. (mounted). (Memorial 1920).  
Presented by the son of the late Mr. McArthur Butler.



## Notes

### THE PLANNING OF LIBRARIES

On Wednesday, 24 March, at the monthly meeting of the London and Home Counties Branch of the Library Association, the plans of a number of new municipal libraries will be exhibited and discussed. The discussion will be opened by Mr. E. J. Carter, the R.I.B.A. librarian, and Mr. J. E. Walker, F.L.A., librarian of the Hendon Public Libraries, and Vice-Chairman of the Branch. The Library Association extends a special invitation to architects to attend this meeting, which will be held at 6.30 p.m., at Chaucer House, Malet Place, W.C.1. (Malet Place leads off Torrington Place.)

### HONOUR FOR MR. JOHN KEPPIE

Mr. John Keppie [F.] has been elected a member of the Royal Scottish Academy.

### INTERNATIONAL ASSOCIATION FOR TESTING MATERIALS

#### PRELIMINARY NOTICE

The Second International Congress of this Association will be held in London from 19-24 April 1937.

The object of the Congresses is to obtain international co-operation in the study of materials and their testing, and to provide facilities for the exchange of views, experience and knowledge with regard to all matters connected with this subject. The London Congress should be of considerable scientific and industrial importance, particularly in view of the length of time which has elapsed since the study and testing of materials were last reviewed on an international basis.

The organisation of the Congress has been undertaken by a Congress Organising and Reception Committee, which consists of the British Committee of the International Association for Testing Materials and representatives of many leading British Technical Institutions, Scientific Societies and Industrial Organisations. The Executive Committee of the Congress Organising Committee is composed as follows:—Sir Frank Smith, K.C.B., C.B.E. (Secretary of the Royal Society, and Secretary D.S.I.R.) (Chairman), Sir William Larke, K.B.E. (Vice-Chairman), Sir Harold Carpenter, F.R.S., Sir Alexander Gibb, F.R.S., Dr. H. J. Gough, F.R.S., Sir Nigel Gresley, C.B.E., Sir Clement Hindley, K.C.I.E., Mr. K. Headlam-Morley (Hon. Sec.).

Sir William Bragg, O.M., K.B.E., P.R.S., Director of the Royal Institution of Great Britain, has consented to be President.

Participation in the Congress will be open to all interested in the study of materials and their testing on payment of the Membership Fee.

The subjects selected for discussion at the Congress are divided into four groups dealing respectively with Metals, Inorganic Materials, Organic Materials and Subjects of General Importance.

In addition to the technical sessions of the Congress, numerous visits to places of scientific and industrial interest will be arranged, as well as excursions and social functions, including a banquet, a dance and official receptions. Special arrangements will be made or the entertainment of ladies.

Detailed information about the Congress will be issued in due course. All enquiries should be addressed to the Hon. Sec., Mr. K. Headlam-Morley, at the offices of the British Committee, 28 Victoria Street, London, S.W.1; Telephone No.: London, Victoria 7151.

### INTERNATIONAL EXHIBITION FOR ISLAMIC ARCHITECTURE

The International Exhibition of Architecture, which it was proposed to hold in Cairo in April 1937, has been, owing to the Paris Exhibition, postponed until April 1938, in order to allow those engaged in the Paris Exhibition to participate in the Cairo one. All applications to submit designs will be accepted until 28 February 1938.

### ANOTHER NEW YEAR HONOUR

Mr. John Wittet [F.] is another member of the Institute to be honoured in the recent New Year's list. He has been made a C.B.E.

### MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE

The Architects' Registration Council of the United Kingdom offer for award in June 1937 certain Maintenance Scholarships in Architecture. The scholarships will consist of a grant for the payment, in whole or in part, of the school fees and necessary subscriptions, instruments, books, etc., and, when necessary, a maintenance allowance not to exceed as a rule £100 a year. The scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the Council. The scholarships will be available both for students who have already begun their training and for students wishing to begin their training. They would not normally be granted to students under 17 years of age.

Particulars and forms of application may be obtained from the secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68 Portland Place, London, W.1. The closing date for the receipt of applications, duly completed, is 22 March 1937.

### THE ALEXANDER THOMSON TRAVELLING STUDENTSHIP

The Competition for the above Studentship is open to Students of Architecture between the ages of 19 and 28 years, residing in the United Kingdom. Copies of the Conditions may be obtained on application to William MacLean, Secretary, Glasgow Institute of Architects, 21 West George Street, Glasgow, C.2.

### NOTES FROM THE MINUTES OF THE COUNCIL

9 February 1937

#### ELECTION OF ROYAL GOLD MEDALLIST, 1937

Sir Raymond Unwin (Past President) was formally elected as Royal Gold Medallist for 1937.

#### R.I.B.A. WINTER EXAMINATIONS, 1936

The Board of Architectural Education reported the results as follows:—

	Examined	Passed	Relegated
Intermediate Examination .. ..	175	80	95
Final Examination .. ..	210	65 and 38 (Part I only)	107
Special Final Examination .. ..	48	12 and 9 (Part I only)	27

Examination in Professional Practice for Students of Schools of Architecture recognised for Exemption from the R.I.B.A. Final Examination .. ..

13	11	2
1	1	0

## R.I.B.A. EXAMINERS, 1937

On the recommendation of the Board of Architectural Education the Examiners for the year ending 31 December 1937 were appointed.

UNIVERSITY OF LONDON ARCHITECTURAL EDUCATION  
COMMITTEE: APPOINTMENT OF R.I.B.A. REPRESENTATIVES

Mr. T. A. Darcy Braddell [F.] and Mr. Hubert Lidbetter [F.] were re-nominated as the R.I.B.A. representatives on the Architectural Education Committee of the University of London.

## BRITISH STANDARDS INSTITUTION

In consequence of Mr. L. W. Thornton White's departure from England to take up his appointment as Professor of Architecture at the University of Capetown, the following appointments were made:—

## BUILDING DIVISIONAL COUNCIL

Mr. Walter Goodesmith [A.].

TECHNICAL COMMITTEE B/25, STANDARD SYSTEM OF COLOURS  
FOR CONDUITS IN BUILDINGS

Mr. Walter Goodesmith [A.].

## TECHNICAL COMMITTEE 18/3, HIGH TENSILE STRUCTURAL STEEL

Mr. P. J. Waldram [L.].

Mr. Godfrey H. Samuel [A.] was appointed to represent the R.I.B.A. on Technical Committee CH/16, Dustbins and Storage Containers.

JOINT SUB-COMMITTEE OF THE SCIENCE STANDING COMMITTEE AND  
THE BOARD OF ARCHITECTURAL EDUCATION ON THE SUGGESTED  
UNDERGRADUATE TRAINING OF ARCHITECTS IN CONNECTION WITH  
AIR RAID PRECAUTIONS

Mr. Thomas Wallis [F.] was appointed to represent the Science Standing Committee in place of Mr. Thornton White.

## PUBLIC RELATIONS COMMITTEE

Mr. F. R. Taylor [L.] was appointed as the representative of the Science Standing Committee on the Public Relations Committee in place of Mr. Thornton White.

## PROPOSED JOINT COMMITTEE ON SMOKE ABATEMENT

Mr. P. J. Waldram [L.] was appointed to represent the Institute on a proposed Joint Committee on Smoke Abatement.

R.I.B.A. ARCHITECTURE BRONZE MEDALS: LEICESTER AND  
LEICESTERSHIRE SOCIETY OF ARCHITECTS

Mr. T. C. Howitt [F.] was appointed as the R.I.B.A. representative on the Jury for the award of the R.I.B.A. Architecture Bronze Medal in the area of the Leicester and Leicestershire Society of Architects.

CONFERENCE TO CONSIDER THE POSSIBLE INSTITUTION OF COURSES  
OF INSTRUCTION, EXAMINATIONS AND THE CREATION OF A DIPLOMA  
IN ILLUMINATING ENGINEERING

Mr. L. H. Bucknell [F.] was appointed as the R.I.B.A. representative on the Conference called by the National Illumination Committee of Great Britain to consider the possible institution of courses of instruction, examinations and the creation of a diploma in illuminating engineering.

ROYAL SANITARY INSTITUTE HEALTH CONGRESS, BIRMINGHAM  
Mr. Alfred Hale [F.], President of the Birmingham and Five Counties Architectural Association, was appointed as the R.I.B.A. delegate to the Health Congress of the Royal Sanitary Institute to be held at Birmingham from 12 to 17 July 1937.

ANNUAL CONGRESS OF THE ROYAL INSTITUTE OF PUBLIC HEALTH  
AND THE INSTITUTE OF HYGIENE, MARGATE

Mr. H. Anderson [F.], Chairman of the Canterbury District Chapter of the South-Eastern Society of Architects, was appointed as the R.I.B.A. delegate to the Annual Congress of the Royal Institute of Public Health in conjunction with the Institute of Hygiene to be held at Margate from 25 to 29 May 1937.

## JUNIOR MEMBERS' COMMITTEE

Mr. John Summerson [A.] was appointed as Chairman of the Junior Members' Committee in place of Mr. L. W. Thornton White.

## SALARIED MEMBERS' COMMITTEE

Mr. Roderick C. Fisher [A.] was appointed as a member of the Salaried Members' Committee.

## THE PLACING OF SUB-CONTRACTS

On the recommendation of the Practice Standing Committee it was decided to reprint the memorandum on the Placing of Sub-Contracts published in the JOURNAL of 23 January 1937 as a separate leaflet, and to issue a copy with every copy of the 1931 Form of Contract which is sold.

## DRAFT AGREEMENT

The revised draft Form of Agreement between a Local Authority and a Firm of Architects, prepared by the Practice Standing Committee in conjunction with the Institute Solicitor, was approved for substitution in place of the existing form.

PROPOSED LONDON COUNTY COUNCIL BYE-LAWS FOR THE USE OF  
TIMBER IN THE CONSTRUCTION AND CONVERSION OF BUILDINGS

The Science Standing Committee reported that a memorandum of objections to the proposed Bye-laws for the use of Timber had been prepared by a special sub-committee set up for the purpose, and submitted to a joint committee of representatives of the R.I.B.A., the Chartered Surveyors' Institution, the Institution of Civil Engineers and the Institution of Structural Engineers.

It was reported that the Joint Committee had agreed upon a letter embodying a number of objections, to be sent to the Minister of Health by each of the four bodies. The letter had accordingly been signed by the Secretary R.I.B.A. and sent to the Minister by the stipulated date.

It was further reported that the Joint Committee had since met representatives of the London County Council in order to discuss the objections submitted.

THE BRITISH WATERWORKS ASSOCIATION: STANDING COMMITTEE  
ON WATER REGULATIONS

It was reported to the Council that the work of the Standing Committee on Water Regulations was of little interest to architects, and on the recommendation of the Science Standing Committee it was decided to withdraw the R.I.B.A. representative from this Committee.

AMENDMENT OF THE ARTICLES OF ASSOCIATION OF THE MANCHESTER  
SOCIETY OF ARCHITECTS

Amendments in the Articles of Association of the Manchester Society of Architects were formally approved.

## MEMBERSHIP

The following members were elected:—

As Fellows	..	..	..	4
As Associates	..	..	..	26
As Licentiates	..	..	..	14

## Election 8 March 1937

Applications for membership were approved as follows:—

As Fellows	..	..	..	5 applications
As Associates	..	..	..	91 "
As Licentiates	..	..	..	5 "

## Reinstatements

The following ex-members were reinstated:—

As Associates: Samson Abraham Elijah, Bernard Jessop, Philip Evans Palmer, Hugh Alexander Ross, Henry Bartholomew Tunnard.

## Resignations

The following resignations were accepted with regret:—

Elijah Jones [F.].  
Harold Clapham Lander [F.].  
Thomas Tyssen Grey Donaldson-Selby [L.].  
Charles Mitchell [L.].

## Transfer to the Retired Members' Class

The following members were transferred to the Retired Members' Class:—

As Retired Fellows: Joseph Berry, William Theodore Perciva Bryce, Colonel Arthur Easton, William Joseph Waghorne.  
As Retired Licentiates: Miss Florence Fulton Hobson, Albert W. G. Prosser.

## Transfer to Associateship

The following architect was transferred to the Associateship under the provisions of the Supplemental Charter of 1925:—

George Newell [L.].

## Obituaries

### JOHN BEGG [F.]

Mr. John Begg's sudden passing leaves a blank in the ranks of Scottish architects which will not be easily filled.

I did not meet him personally until after his return from India, but as a young student I had learned what pencil drawing might be from reproductions of the work which gained for him the Pugin. It has been my privilege in recent years to see the original drawings, and I found my admiration in no way diminished.

John Begg's great opportunity came when he was appointed Chief Architect to the Government of India, and the man was equal to the opportunity. Many fine buildings stand as a memorial to him there.

On retirement from his official appointment he was welcomed as an acquisition to the profession in Scotland and, as President of the Edinburgh Architectural Association, and, later, of the Royal Incorporation of Architects in Scotland, he gave devoted service to the profession and to the awakening of public interest in architecture.

As head of the Edinburgh School of Architecture he did remarkably fine work amongst the students, raising the school to a very high standard. Many students must have grateful memories of the help derived from his quiet enthusiasm.

He was on the Council of the Royal Institute at the time of his death, and was a Past Chairman of the Allied Societies' Conference.

At the recent exhibition of studentship drawings in the Henry Florence hall I had the good fortune to accompany him in a survey of the walls, and it was delightful to see the wholehearted interest he took in the students' work and illuminating to listen to his understanding criticisms.

In all his many and varied activities he showed such quietude of spirit that one wondered if the East, in return for his labours there, had cast over him the mantle of her selfless philosophy.

There was no littleness about John Begg.

C. G. S.

The following obituary of Mr. John Begg was published in *The Times* of Friday, 26 February:

Mr. John Begg, [F.], F.R.I.A.S., who died in Edinburgh on 23 February, in his seventy-first year, was the first consulting architect to be in the regular employment of Government in India outside the ranks of Public Works Department engineers. Many memorials to his skill and judgment are to be seen among the buildings of Bombay, New Delhi and other Indian cities, and his annual reports had their influence on modern architectural development in the country.

The third son of an ironmaster at Kinneil, he was born at Bo'ness, Scotland, and was educated at Edinburgh Academy and the Royal Academy Schools. At the R.I.B.A. he was

Pugin student in 1890, Ashpitel prizeman in 1891, and silver medallist in 1894. He was articled to H. J. Blane, of Edinburgh, and served with Alfred Waterhouse, R.A., and as head assistant with R. W. Edis. He spent some four years in South Africa as architect to the Real Estate Corporation, and in 1901 was made Consulting Architect to the Government of Bombay, where the General Post Office is one of the outstanding monuments of his work. In 1908 he went to headquarters as Consulting Architect to the Government of India, a post he filled until 1921. One of Begg's achievements at New Delhi was the Lady Hardinge Medical College and Hospital. On returning to Edinburgh in 1921 he resumed private practice, designed the housing scheme for the Grassmarket there, and was the architect of many houses in the city and suburbs. He was married and had two sons.

[In addition to the buildings mentioned in *The Times*, Mr. Begg was responsible for the following buildings: in Bombay, The Sir Wm. Moore Operating Theatres, 1905; Princes Dock Custom House, 1904; in Calcutta, Council House Street Secretariat, 1909; The Stationery Office, 1912; fourth block, Calcutta Medical College, 1911; various military buildings in Delhi; in Rangoon, the Custom House, 1915; and many other buildings elsewhere in India, including the Benares Law Courts, 1915; the Nagpur and Agra Post Offices; the Central Provinces Council Chamber, Nagpur, 1917; and Anglican churches at Jubbulpore, Lucknow and Maymyo, and Presbyterian churches at Simla, Jubbulpore, Quetta, etc. The funeral took place on 25 February. The R.I.B.A. and the Allied Societies' Conference were represented by Mr. Walter Todd, Vice-President of the Royal Incorporation of Architects in Scotland.]

### ARTHUR J. PENTY AN APPRECIATION

Arthur J. Penty died on 19 January 1937 at the age of 61. He was junior partner in Penty & Penty, Architects, of York, when I went to them as assistant early in '99.

They had a large practice, and Arthur, then about 23, was responsible for the design and detail. He was an enthusiastic disciple of Ruskin and Morris, and doing exceedingly good work—outrageously modern for the Yorkshire of those days—being sound and sensible, and based on the right use of materials, it had a freshness which, at that time and place, amounted to originality. With no outside experience or training he was one of the outstanding pioneers of that type of architecture in the north of England.

His first important work, "Aldersyde," York (1896), was based on a very close study of the work of Norman Shaw. From this he developed quickly to a more personal expression in work such as "The Four Alls," near York (1897), and "Fish and Game Shop," Feasegate, York (1897-98), inspired perhaps by his delight in the simple and straightforward design and building detail of the lesser Georgian brick buildings in York.

"Terry's Almshouses" and "Davy Hall Restaurant," York (1900), "The Creamery Restaurant," York, and "Dunollie," Scarborough (1901-02), show further development, achieving unity rather by logical and traditional building methods than by stylistic design.

Penty was nearly as much concerned with the ethics of production as the aesthetics of production. Later when he settled in town he devoted most of his time and thought to the ethics of production in the belief that good architecture is impossible until the social system is more rationally organ-

ised and controlled. He worked for a qualitative, as opposed to the more generally accepted quantitative, basis for society.

He came to town in 1902, and whilst attempting to build a practice here and doing some very good work at the Golders Green Garden Suburb as assistant to Mr., now Sir Raymond, Unwin, he worked with A. R. Orage and Edward Spencer on a scheme for social reconstruction based on the Guild system; but they soon diverged, Penty and Orage developing separate theories. Since then he has published many books and articles on architecture and social reconstruction, and scholars of many nationalities came to him at Isleworth to discuss his theories, which appear to have been appreciated most in the countries which are less stable politically than Great Britain.

About 1905 he and Mr. Charles Spooner joined forces as Elmdon & Co. for the design and production of furniture. In the foreword to their catalogue they said: "The qualities to be looked for in good design are not so much the enrichment of the thing, as pleasing proportion, and the fact that the thing, whatever it may be, looks, and is, convenient and altogether suitable for its purpose, and for the material of which it is made"—an early recognition of the functionalists' slogan "Fitness for Purpose." The word I have underlined was in Penty's view a necessary qualification.

Amongst his buildings since 1902 are "Wildsbottom," Hampstead Garden Suburb (1911-12); "Noonfield," Haslemere (1912); and "Hillway," Ditchling (1928), a particularly fine piece of work. Immediately before his death he com-

pleted the drawings for a church at Liverpool, about which he had been consulted.

His publications, in addition to articles in the *Journal of the American Institute of Architects*, *The American Review*, *The Criterion* and many periodicals, architectural and political, were: "The Restoration of the Guild System" (1906); "Old Worlds for New" (1917), Italian and Chinese translations; "Guildsman's Interpretation of History" (1920); "Guilds and the Social Crisis"; "Guilds Trade and Agriculture" (1921), German, Chinese and Japanese translations; "Post Industrialism," German translation; "Towards a Christian Sociology," German, Chinese and Japanese translations; "Protection and the Social Problem"; "Means and Ends"; "The Elements of Domestic Design" (1931); "Communism and the Alternative" (1936). One book ("Authority and Liberty in Architecture") has not yet found a publisher.

His last work, "Tradition and Modernism in Politics," finished by dictation to Mrs. Penty a few days before his death, is to be published by Messrs. Sheed & Ward.

As a man he was lovable, simple-minded and sincere, with a strong sense of humour and a delightful Yorkshire accent.

Too honest with himself to adopt lightly any ready-made creed or slogan to which he could not give his wholehearted support, or to compromise with his own convictions or code for personal profit or advancement, it was inevitable that his influence on this generation should be infinitely more real than apparent.

JOSEPH ARMITAGE

## ALLIED SOCIETIES

### THE BIRMINGHAM AND FIVE COUNTIES ARCHITECTURAL ASSOCIATION

The fourth general meeting of the session was held in the galleries of the Royal Birmingham Society of Artists on Friday, 27 November, when the President, Mr. Alfred Hale [F.], occupied the chair and a paper entitled "Sculpture on Machine-made Buildings" was read by Mr. Eric Gill [Hon. A.].

In discussing this subject, the lecturer said, the political and religious background of life must be considered. To-day the financier is supreme, everything produced must yield a profit, and the result is that we are living in a machine age where the workman has ceased to be an individual and has become simply a "hand." Moreover, as the wishes of the customer or client have every right to be respected—for "he who pays the piper calls the tune"—the architect should always keep in mind the difference between the present world of the machine and the previous world of hand-work.

This fundamental difference is not yet always fully appreciated either by the architect or by his client, who often find it difficult to leave out ornament from their buildings. But it is becoming increasingly realised that plain buildings have an inherent beauty which is not enhanced by the addition of ornament, and the good architect and the decent client are now being led to the conclusion that in modern building there is no place for architectural sculpture.

### SCOTTISH ARCHITECTS

At a recent meeting of the Council of The Royal Incorporation of Architects in Scotland, held at 15 Rutland Square, Edinburgh, Mr. Chas. G. Soutar [F.], Dundee, President, in the chair, it was decided to present a Loyal Address to H.M. King George VI.

Congratulations were extended to Mr. James Macgregor, M.A. [A.], School of Architecture, Edinburgh College of Art, upon his appointment as head of the School of Architecture in Cambridge.

It was reported that an award of a Bronze Medal presented by the Royal Institute of British Architects would shortly be made to the architect of the building of most outstanding merit in Scotland completed during the period from 1927-1935.

Regret was expressed that no local authority in Scotland had yet set up the Local Advisory Committees contemplated in the Housing Act of 1935 and whose appointment had been strongly recommended by the late Secretary of State for Scotland. The Council decided to continue urging the Department of Health to secure the establishment of such committees.

The question of employment of local architects in connection with the Empire Exhibition in Glasgow in 1938 was also discussed and recommendations made to the Committee of Management.

The Annual Convention of The Royal Incorporation this year is to be held in St. Andrews on 4 and 5 June.

### CAMBRIDGE CHAPTER

#### CHRISTMAS HOLIDAY LECTURES TO BOYS AND GIRLS

A successful course of two lectures on architecture was given independently in Cambridge and the Isle of Ely (March and Wisbech) on 6, 7, 14 and 19 January. The subject of the first lecture, by Mr. Theodore Fyfe [F.], was "How to look at Architecture," and the second lecture, by Mr. H. C. Hughes [F.], "How to Recognise Buildings."

They had financial support from the Cambridge and Isle of Ely County Councils, and the Directors of Education for these bodies—respectively Mr. Henry Morris and Mr. E. J. P. Osborne—were most helpful in their advice and active support.

Good audiences of about 150 upwards were obtained, mostly of children of 14 years and over, but many of the school teachers, as well as the adults, attended. The lectures, which were illustrated by lantern slides, were very appreciatively received. It is hoped that they will be continued next year.



## SCHOOL NOTES

## THE LEEDS SCHOOL OF ARCHITECTURE

Mr. J. S. Allen, the head of the Leeds School of Architecture, has been appointed Vice-Principal of the College of Art, and will retain his present position as head of the School of Architecture.

The announcement of the first awards of the scholarships set up under the will of the late Mr. Hoffinan Wood has been made. The successful candidates are Messrs. K. J. Caton and G. V. Robertshaw, who are fifth-year students at the Leeds School of Architecture (College of Art). The scholarships, which are of the value of £250 and £150 respectively this year, have been founded for "the advancement of architectural training, either by study or travel in ancient or modern cities, of any boy or girl born within Yorkshire of one or two Yorkshire parents." An approved course of post-graduate study and travel (possibly in America) will be undertaken by the successful candidates.

Another student of the school, Mr. Harold Wharfe, has been awarded the second prize in the Competition for a Tourist Camp recently organised by the Timber Development Association. Mr. Wharfe, who is 20 years of age, is a fourth-year student and was awarded the Archibald Dawney Scholarship, value £50, for the Session 1936-37.

Subject to the final agreement of the traders' associations, the school has been asked to design the Coronation decorations for the whole of the centre of the city. The total length of route involved is approximately 2,000 yards and includes The Headrow, Briggate, Boar Lane, Park Row and Bond Street. In The Headrow brightly coloured pylons will be erected in the middle of the street, in the positions occupied by the lamp standards, whilst banners 25 feet long will be suspended from the buildings lining the route. At other suitable points banners suspended from poles will be used to give continuity to the decorative scheme. This is probably the largest single scheme of decoration for the Coronation yet undertaken in the provinces. An exhibition showing a number of suggestions for street decoration was recently held by the school in collaboration with the West Yorkshire Society of Architects.

## LIVERPOOL SCHOOL OF ARCHITECTURE

## LECTURE ON AMERICA

Mr. D. Winston, a Commonwealth scholar, lectured to the school on 6 November 1936. He said that the Liverpool School had always been America-conscious; many of the students had visited the States for office experience, and there are many who come to the school from Canada and the countries of South America. But the country as a whole, partly because her vanity had been injured by the independence and growing power of her old colony, had never really fully recognised America as a civilised Power, in spite of her self-evident achievements in government, art, literature and science.

This was partly the fault of America for flooding the European market with the more objectionable products of her civilisation. But America took in exchange the art treasures and literature of Europe.

This unequal exchange seems to offer a certain parallel with the way in which decadent Greece and young Rome influenced each other.

While the disrupting Empire of Alexander copied the fashion and vices of Rome, the Romans, who were shortly to be the masters of the world, drew inspiration from the arts and philosophy of Greece.

Mr. Winston then said he hoped to show by reference to one particular aspect of America's contribution to civilisation, namely, in architecture, that this contribution had been indeed a worthy one, and he then illustrated his contention by means of slides.

In the States, he concluded, architecture has always been accepted in its widest sense. He did not think that to-day we could usefully distinguish between the work of the town-planner, the landscape designer, and the designer of separate buildings. These were really departments of architecture—the job of design for better living.

## Notices

## THE SEVENTH GENERAL MEETING,

MONDAY, 8 MARCH 1937, AT 8 P.M.

The Seventh General Meeting of the Session 1936-1937 will be held at 8 p.m. on Monday, 8 March 1937, for the following purposes:—

To read the Minutes of the Sixth General Meeting held on Monday, 22 February 1937; formally to admit members attending for the first time since their election.

Mr. G. L. Pepler, F.S.I., to read a paper on "Town and Country Planning under the Act," and Mr. G. H. Jack, M.Inst.C.E., F.S.A. [F.], to read a paper on "The Working of the Advisory Panel System."

## THE EIGHTH GENERAL MEETING,

MONDAY, 22 MARCH 1937, AT 8 P.M.

The Eighth General Meeting of the Session 1936-1937 will be held at 8 p.m. on Monday, 22 March 1937, for the following purposes:—

To read the Minutes of the Seventh General Meeting held on Monday, 8 March 1937; formally to admit members attending for the first time since their election.

Professor W. G. Holford, B.Arch.Lvpl. [A], and Mr. A. G. S. Fidler, B.Arch.Lvpl. [A], to read a joint Paper on "The British School at Rome."

## INFORMAL GENERAL MEETING,

WEDNESDAY, 24 MARCH 1937, AT 6.15 P.M.

The next Informal General Meeting will be held on Wednesday, 24 March 1937, at 6.15 p.m., and not on Wednesday, 10 March, as previously announced.

The Meeting will be devoted to a discussion on "Modern Architecture and the Countryside."

The discussion will be opened by Mr. E. Maxwell Fry, B.Arch.Lvpl.(A.) and Mr. William Palmer, Secretary of the Society for the Protection of Ancient Buildings.

Tea will be served from 5.30 p.m. onwards.

## R.I.B.A. DRAMATIC SOCIETY

The first lecture arranged for this year by the R.I.B.A. Dramatic Society will be given at the R.I.B.A. on Friday, 19 March, at 8.30 p.m., by Mr. W. S. Kennedy, Chairman of the Incorporated Stage Society. Mr. Kennedy's subject will be "Illusion in the Theatre," and the lecture will be free to all who are interested.

It is hoped that during the year an interesting series of lectures dealing with various aspects of the theatre will be arranged.

#### EXHIBITION OF AIRPORTS AND AIRWAYS, 20 FEBRUARY TO 24 MARCH 1937

The Exhibition of Airports and Airways, which was opened by The Rt. Hon. Viscount Swinton, P.C., G.B.E., M.C., Secretary of State for Air, on Friday, 19 February, will remain open, free to the public, until Wednesday, 24 March 1937, inclusive. The Exhibition will be open between the hours of 10 a.m. and 8 p.m., Saturdays 10 a.m. and 5 p.m.

#### BRITISH ARCHITECTS' CONFERENCE, LEEDS, 23-26 JUNE 1937

The Annual Conference of the Royal Institute of British Architects and of its Allied and Associated Societies will take place at Leeds from 23 to 26 June 1937.

The West Yorkshire Society of Architects have in hand the preparation of a most attractive programme and particulars will be issued in due course.

#### R.I.B.A. ANNUAL RECEPTION

The Council have decided to hold a Reception at the R.I.B.A. on Friday, 28 May 1937. Further details will be published in due course.

#### ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND ANNUAL CONVENTION 1937

The Annual Convention of the Royal Incorporation of Architects in Scotland will take place at St. Andrews, Fifeshire, on Friday and Saturday, 4 and 5 June 1937.

#### BUILDING SURVEYING EXAMINATIONS

The R.I.B.A. Statutory Examination qualifying for candidature as District Surveyor in London and the R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 5, 6 and 7 May 1937. Applications for admission to the examinations must be received not later than 5 April 1937.

#### PROFESSIONAL ADVERTISING

The attention of the Practice Standing Committee has been drawn to the fact that the publishers of certain journals are approaching architects for details of their professional activities, which the publishers propose to embody in the editorial columns of their journals. In the case of one particular firm of publishers, several members forwarded to the Institute the proposed article as drafted by the editor and sent to the architects for any additions or amendments the architects desire. In each case the wording of the articles is identical, with the exception of the names and addresses of the firms of architects to whom they were sent.

The Committee desire to warn members generally against this undesirable form of publicity. The acceptance by members of invitations of this nature from firms of publishers is, in the opinion of the Committee, directly contrary to the Code of Professional Practice and tantamount to advertising.

#### THE RECEPTION OF NEW MEMBERS AT GENERAL MEETINGS

It has been decided by the Council to modify the procedure for the introduction and reception of new members at General Meetings. In future new members will be asked to notify the Secretary beforehand of the date of the General Meeting at which they desire to be intro-

duced and a printed postcard will be sent to each newly elected member for this purpose. They will be asked to take their seats on arrival in a special row of seats reserved and marked for them. At the beginning of the meeting on the invitation being given to present themselves for formal admission each new member will be led up to the Chairman by one supporter, and the Chairman will formally admit them to membership.

The introduction and reception of new members will take place at any of the forthcoming Ordinary General Meetings of the Royal Institute with the *exception of the meeting on the following date* :—

12 April 1937 (Presentation of the Royal Gold Medal).

#### THE USE OF THE TITLES "CHARTERED ARCHITECT" AND "REGISTERED ARCHITECT"

Now that the Registration Act is in force the Council have been asked to give advice with regard to the best way to use the title "Registered Architect" by members of the R.I.B.A. who have been placed on the Register, and who already have the right to use the designation "Chartered Architect."

The Council recommend that members of the R.I.B.A. who have been registered should use the designation "Chartered and Registered Architect."

#### ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 10 May 1937 they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 13 March 1937.

#### LICENTIATES AND THE FELLOWSHIP

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (c), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

#### OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

## Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional

Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

#### ABERDEEN: LAY-OUT OF KINCORTH

The Corporation of the City and Royal Burgh of Aberdeen invite architects to submit in competition designs for the lay-out of a part of Kincorth Estate, Aberdeen.

Assessor: Dr. Thomas Adams, F.S.I., P.P.T.P.I. [F.].

Premiums: £500 and £350 to be divided between the authors of not more than three designs next in order of merit to be decided by the Assessor.

Last day for submitting designs: 31 July 1937.

Last day for questions: 31 March 1937.

Conditions of the competition may be obtained on application to Mr. G. S. Fraser, Town Clerk, Town House, Aberdeen. Deposit £1 is.

#### BILSTON: CENTRE HEALTH CLINIC

The Borough Council of Bilston invite architects resident in England and Wales to submit in competition designs for a new Centre Health Clinic.

Assessor: Mr. William T. Benslyn, A.R.C.A. [F.].

Premiums: £40, £35 and £25.

Last day for submitting designs: 20 April 1937.

Last day for questions: 27 February 1937.

#### BIRMINGHAM: NEW CENTRAL TECHNICAL COLLEGE, ETC.

The Corporation of the City of Birmingham invite architects of British nationality and domiciled in the United Kingdom to submit in competition designs for a new Technical College, Commercial College and College of Art and Crafts.

Assessor: Mr. James R. Adamson [F.].

Premiums: £750, £500, £250.

*The last day for receiving designs has been extended to 30 April 1937.*

Last day for questions: 19 October 1936.

#### BRISTOL: NEW CHURCH

The St. Leonards (City) Vestry invite practising architects who are members of the Wessex Society of Architects to submit in competition designs for a new Church at Redfield, St. George's, Bristol.

Assessors: Mr. G. D. Gordon Hake, R.W.A. [F.].

Mr. H. Stratton Davis, M.C., F.S.A. [F.].

The Rev. J. M. D. Stancomb } To count as

The Rev. I. T. Page-Wood } one vote.

Premiums: £100, £50, and £30.

Last day for submitting designs: 21 May 1937.

Last day for questions: 22 March 1937.

Conditions of the competition were obtainable *not later than 6 March 1937* on application to Mr. E. M. Harley, St. Leonards Vestry Clerk, 19 Orchard Street, Bristol, 1. Deposit £1 is.

#### BROADSTAIRS: LAY-OUT OF ESTATE

The Broadstairs and St. Peter's Urban District Council invite architects to submit in competition designs for the lay-out as a high-class residential area and improvement of the amenities of the sea-front, a portion of the late Lord Northcliffe's North Foreland Estate.

Assessor: Mr. W. R. Davidge, F.S.I., M.T.P.I. [F.].

Premiums: £100, £50 and £25.

**Last day for submitting designs has been extended to 6 May 1937.**

Last date for questions: 20 February 1937.

Conditions of the competition may be obtained on application to the Clerk of the Council, Pierremont Hall, Broadstairs. Deposit £1 is.

#### DAWLISH: NEW COTTAGE HOSPITAL

The Governors of the Dawlish Cottage Hospital invite architects of British nationality practising within 200 miles of Dawlish to submit in competition designs for a new Cottage Hospital.

Assessor: Mr. Leslie T. Moore, M.C. [F.].

Premiums: £100, £75 and £50.

Last day for sending in designs: 28 April 1937.

Last day for questions: 6 February 1937.

Conditions of the competition may be obtained on application to the Hon. Secretary, Dawlish Cottage Hospital, Dawlish, Devon. Deposit, £1 is.

#### FRIERN BARNET: NEW MUNICIPAL BUILDINGS

The Friern Barnet Urban District Council invite architects to submit in open competition designs for new Municipal Buildings.

Assessor: Mr. C. Cowles-Voysey [F.].

Premiums: 150 guineas, 100 guineas and 50 guineas.

Last day for submitting designs: 21 June 1937.

Last day for questions: 22 March 1937.

Conditions of the competition may be obtained on application to Mr. G. T. Fletcher, Clerk of the Council, Council Offices, The Priory, Friern Barnet, London, N.11. Deposit £1 is.

#### GLOUCESTER: NEW SECONDARY SCHOOL FOR BOYS

The Governors of the United Schools, Gloucester, propose to hold a competition open to all registered architects for a new Secondary School for Boys at Podsmead.

Assessor: Mr. H. Stratton Davis, M.C., F.S.A. [F.].

Premiums: £200, £100 and £50.

Last day for sending in designs: 27 May 1937.

Last day for questions: 20 March 1937.

Conditions of the competition may be obtained on application to Dr. H. J. Larcombe, M.A., Clerk to the Governors, Gloucester United Schools, Belsize House, Brunswick Road, Gloucester. Deposit £1 is.

#### GOSPORT: LIMITED COMPETITION FOR A NEW PUBLIC ELEMENTARY SCHOOL

The Education Committee of the Borough of Gosport invite architects resident or practising in Gosport and Portsmouth to submit in competition designs for a new Public Elementary School to be erected on a site between Elson Road and Rydal Road.

Assessor: Mr. Geoffrey C. Wilson [F.].

Premiums: £100, £50, and £25.

Last day for submitting designs: 7 May 1937.

Last day for questions: 4 March 1937.

#### HACKNEY: NEW CENTRAL BATHS

The Council of the Metropolitan Borough of Hackney invite architects to submit in open competition designs for a new Central Baths proposed to be erected in Clapton Square and Lower Clapton Road.

Assessor: Mr. Frederick J. Horth [F.].

Premiums: £500, £300 and £200.

Last day for receiving designs: 31 May 1937.

Last day for questions: 18 March 1937.

Conditions of the competition may be obtained on application to Mr. R. H. R. Tee, Town Clerk, Town Hall, Hackney, London, E.8. Deposit £1 is.

**MANCHESTER : DESIGN FOR PHYSICAL TRAINING CENTRE**

The Management of the Fifteenth Manchester Building Trades' Exhibition invite architects of British nationality to submit in competition designs for a Physical Training Centre.

Assessors : Professor R. A. Cordingley [F.].

Mr. W. A. Johnson [F.].

Mr. Francis Jones [F.].

Premiums : £75, £50 and £25.

Last day for submitting designs : 27 March 1937.

Conditions of the competition may be obtained free on application to Provincial Exhibitions, Ltd., City Hall, Deansgate, Manchester, 3.

**SYDNEY, N.S.W. : EXTENSION OF ST. ANDREW'S CATHEDRAL**

The following cablegram has been received from Mr. B. J. Waterhouse [F.], one of the Assessors in the above competition.

"Please inform competitors closing date St. Andrew's competition extended First June, Thirty-seven. Answers questions sent. Waterhouse."

**WEYMOUTH : NEW BANDSTAND ENCLOSURE**

The Town Council of the Borough of Weymouth and Melcombe Regis invite architects to submit in competition designs for a new Bandstand Enclosure on the sea front.

Assessor : Mr. H. S. Goodhart-Rendel [F.].

Premiums : £150, £100 and £50

Last day for submitting designs : 14 May 1937

Last day for questions : 19 February 1937

Conditions of the competition may be obtained on application to Mr. Percy Smallman, Town Clerk, Town Clerk's Office, Weymouth. Deposit £1 is.

**CARPET DESIGN COMPETITION**

The *Furnishing Trades Organiser* is promoting a competition for designs for five types of carpet with two prizes in each class of £5 and £2 10s. There is also a special prize of £2 10s. for the best design submitted by a student aged 18 or under. Students and past-students of recognised Schools of Art or Technology in the British Isles are eligible to compete. Full conditions of the competition are published in the *Furnishing Trades Organiser* for January 1937. There is no entrance fee, and designs have to be submitted not later than 31 March 1937.

**FORTHCOMING COMPETITIONS**

Other competitions which it is proposed to hold, and the conditions for which are not yet available, are as follows :—

**BELFAST : NEW WATER OFFICES**

Assessor : Mr. H. Austen Hall [F.].

**CAMBRIDGE : NEW CREMATORIUM**

Assessor : Mr. H. S. Goodhart-Rendel [F.].

**CHESTER : EXTENSIONS TO CHESTER ROYAL INFIRMARY**

Assessor : Mr. Arthur J. Hope [F.].

**DUNDEE : COLLEGE OF ART**

Assessor : Mr. J. R. Leathart [F.].

**EDMONTON : NEW TOWN HALL BUILDINGS**

Assessor : Mr. E. Berry Webber [A.].

**MACCLESFIELD : NEW NURSES HOME FOR GENERAL INFIRMARY**

Assessor : Professor R. A. Cordingley [F.].

**SOUTH SHIELDS : ASSEMBLY HALL AND LIBRARY**

Assessor : Mr. Arthur J. Hope [F.].

**WREXHAM : NEW TOWN HALL.**

Assessor : Mr. Herbert J. Rowse [F.].

## Members' Column

*Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.*

**JUNIOR PARTNER WANTED**

A VACANCY occurs for a junior partner in an old-established City practice ; must be member of the Institute, and accustomed to good-class domestic and estate works ; reasonable capital required.—Reply Box No. 1927, c/o Secretary R.I.B.A.

**PARTNERSHIP WANTED**

A.R.I.B.A., seven years in private practice, desires employment in country town with view to partnership. Some capital available. Apply Box No. 3337, c/o Secretary R.I.B.A.

**CHANGES OF ADDRESS**

MR. C. C. PITHER [Student] has changed his address to c/o Miss Vincent, Ollards Grove, Loughton, Essex.

MR. JOHN PARR [A.] has changed his address to H.B.M. Office of Works, British Embassy, Istanbul.

MR. W. F. HOWARD [A.] has changed his address to 2 Bessborough Mews, Westminster, S.W.1. Telephone No. : Victoria 7159.

MR. WESLEY DOUGILL [A.] has changed his address to 5 Sandheys Terrace, Waterloo, Liverpool, 22.

MR. H. T. GOODWIN [A.] has changed his office address to Marshall House, 9 Newcomen Street, London Bridge, S.E.1. Tel. No. : Hop 0310.

MR. IVOR P. JONES [A.], Hon. Secretary of the South Wales Institute of Architects, has changed his office address to 6 and 7 St. John's Square, Cardiff. All communications should be sent to the new address.

MR. JOHN A. VIDEAN [L.] has moved his office to 20 Bartlett's Buildings, Holborn Circus, E.C.4. Tel. : Central 1449.

MR. E. B. PARKINSON [L.] has changed his address to 27 Newnham Road, Cambridge.

**TRADE CATALOGUES WANTED**

MESSRS. ERIC COLE & PARTNERS, [FF.], of Cirencester, in conjunction with Messrs. L. W. Barnard & Partners, of Cheltenham, will be pleased to receive trade catalogues, etc., at Market Place, Faringdon (Tel. 99), where they are opening a new branch office, with Mr. F. W. Andrews in charge.

## MINUTES VI

**SESSION 1936-1937**

At the Sixth General Meeting of the Session 1936-1937, held on Monday, 22 February 1937, at 8 p.m., Mr. Percy E. Thomas, O.B.E., President, in the Chair.

The meeting was attended by about 290 members and guests.



The Minutes of the Fifth General Meeting held on 25 January 1937 having been published in the JOURNAL were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of:—

Edwin Beresford Chancellor, M.A., F.S.A., elected Hon. Associate 1928;

The Rt. Hon. Lord Saye and Sele, transferred to Hon. Associateship 1925;

Austin Durst, M.A., elected Licentiate 1911, Fellow 1921;

The Rt. Hon. The Earl Ferrers, F.S.A., elected Fellow 1922;

William Billington Fletcher, transferred to Fellowship 1925;

Herbert Alexander Pelly, elected Associate 1881, Fellow 1904;

Thomas Aloysius Pole, elected Associate 1895, Fellow 1925;

Robert John Thomson, elected Associate 1894, Fellow 1906;

Herbert Winkler Wills, elected Associate 1887, Fellow 1913

(Mr. Wills was Donaldson Medallist for 1884-5 and a member of the Council from 1909 to 1915);

Robert Lempriere Hesketh, elected Associate 1874, Fellow

1880, transferred to Retired Fellowship in 1913;

Charles Daniel Rutter, Retired Member of the Society of

Architects since 1924;

Leopold Edmund Cole, elected Associate 1913;

Peter John Malcolm Johnstone Foubister, elected Associate

1926;

Alexander Paul MacAlister, elected Associate 1895;

Henry Adair Rawlins, F.S.I., elected Associate 1881;

Major James Wightman Douglas, D.S.O., F.S.I., transferred

to Licentiate 1927;

William Francis Rawle Ham, elected Licentiate 1931;

David Edmund Attree Horne, elected Licentiate 1911;

John Hutton, elected Licentiate 1911;

Thomas Loveys, elected Licentiate 1911;

William Beeston, transferred to Licentiate 1925, Retired

Licentiate 1936;

and it was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members, attending for the first time since their election, were formally admitted by the President:—

Frederick G. A. Hall [F.].

J. D. Adam [A.].

Kenneth A. Brundle [A.].

John C. Charter [A.].

F. J. D. Daly [A.].

G. Townsend [A.].

F. B. Ward, Junr. [A.].

N. C. Westwood [A.].

Harold S. Peppiatt [L.].

L. Tattersfield [L.].

Wm. Taylor [L.].

C. G. White [L.].

Mr. T. P. Bennett [F.] having read a Paper on "Building Finance and Architecture," a discussion ensued, and on the motion of Sir Harold Bellman, M.B.E., J.P., seconded by Sir Samuel Instone, a vote of thanks was passed to Mr. Bennett by acclamation and was briefly responded to.

The proceedings closed at 9.35 p.m.

## Architects' and Surveyors' Approved Society

### ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are advised to apply for the prospectus of the Architects' and Surveyors' Approved Society, which may be obtained from the Secretary of the Society, 113 High Holborn, London, W.C.1.

The Society deals with questions of insurability for the National Health and Pensions Acts (for England) under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual sickness, disablement and maternity benefits, the Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

The R.I.B.A. has representatives on the Committee of Management, and insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

## A.B.S. Insurance Department

### THE ARCHITECTS' SPECIAL MOTOR CAR INSURANCE AT LLOYD'S

In conjunction with a firm of Lloyd's Insurance Brokers the Architects' Benevolent Society's Insurance Committee have devised a Special Motor Car Policy for Architects. This policy and the special advantages to be gained from it are available only to members of the Royal Institute of British Architects and its Allied and Associated Societies.

Special features include:—

1. Agreed values for all cars payable at any time in the event of a total loss.
2. A cumulative no-claim bonus from 20 per cent., rising to 33½ per cent. in the third year.
3. No extra premium for business use of car owned by individuals.
4. Prompt claims service in every part of Great Britain; repairs carried out by any garage provided estimate is forwarded immediately.

SPECIMEN RATES FOR FULL COMPREHENSIVE POLICIES ARE GIVEN BELOW. OTHER RATES QUOTED ON APPLICATION

	Premium.
	£ s. d.
7 h.p. Austin, valued at £100 .. ..	8 5 0
9 h.p. Standard, valued at £100 .. ..	9 0 0
11 h.p. Morris, valued at £150 .. ..	9 15 0
20 h.p. Hillman, valued at £300 .. ..	13 7 0

(The rates shown do not apply to cars garaged in London and Glasgow and Lancashire manufacturing towns; rates for these areas will be quoted on application.)

All enquiries with regard to the Special Motor Car Policy for Architects should be sent to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

Members wishing to contribute notices or correspondence must send them addressed to the Editor not later than the Tuesday prior to the date of publication.

### R.I.B.A. JOURNAL

DATES OF PUBLICATION.—1937.—20 March; 10, 24 April; 8, 22 May; 5, 26 June; 17 July; 14 August; 11 September; 16 October.

